

SYSTEAMSGAMES®

THREE GAMES FOR MANAGEMENT SIMULATION

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ABSTRACT

In the session we will describe the models and objectives of three games, followed by demonstration and some examples of interactive game play experience. From 2007 we designed several management games that can be used alone or combined together. All three games exist also in an English language version and they focus on managing of companies with emphasis on systems thinking and team-learning. The application of the games and the learning effects are evaluated by Willy Kriz, Helmut Wittenzellner and Eberhard Auchter (although this ABSEL session concentrates on practical aspects and demo and not on the scientific research and evaluation of these games).

INTRODUCTION

SysTeamsChange® was designed by Willy C. Kriz and Hanja Hansen and is as an example described more in detail below. The game was designed as an interactive education and training tool for preparing change agents and executives for change management and organizational development processes. The game is based on experiences from real change projects, research on organizational development and several theories, e.g. approaches on Learning Organizations (Senge, Argyris etc.), theories on resistance, leadership and motivation in change processes (Kotter etc.), theories on diffusion of innovation and adopter types (Rogers etc.), models on phases of change processes, effective change strategies and change actions (Lewin, Lippitt etc.). SysTeamsChange simulates in 3-5 rounds of play (a total of 8-18 hours time is needed; playing time of about 6 hours, debriefing and additional modules 2-10 hours) a company in a change process. In

total 26 actors with different functions within the company are simulated. The players take the roles of change agents (4-6 players per team and 4-6 teams can take part in a session). Players can use 40 different change actions to manage the change process under budget restrictions and time pressure and to lead the simulated actors through different phases (from shock and resistance to sustainable integration of new work flow processes and structures within the simulated organization). The game is a board game in combination with a computer simulated model. In the session we will play out some decisions, debrief and discuss the game from the perspective of players. In addition we will have a meta-debriefing, discussing design principles and game didactics from the perspective of game designers, trainers and educators.

SysTeamsRybi® (RYBI = Realized Your Business Idea) was designed by Helmut Wittenzellner. This game is a method to implement business ideas into business in eight simple steps. In this way ideas don't get lost in daily business, but will be retained and can be presented within the SysTeamsRybi-process, in a way that they can attain to the general management. The RYBI business plan that is developed in the seminar, will enable the creative minds to show their ideas of how to improve their company. Within the SysTeamsRybi the participants draw up ideas how to manage, restructure or alter the company (in one session 1-4 teams can play with 4-6 participants per team; total time required is 12-18 hours). The game enables teams to frame and define their ideas and enhance them within the seminar in well-structured start-up management and innovations management into a high quality business plan. This business plan can be assessed with a check due to pre-defined criteria (assessment procedure is part of handbook and excel-program delivered with the game) and improved quantitative afterwards.

In addition SysTeamsBusiness® (designed by Willy Kriz and Herbert Schmidt) will be shown. With this general management game participants receive knowledge of economics as well as insights into the main company processes and their interconnections. SysTeamsBusiness simulates a market consisting of several competing companies and so provides the basis for challenging and motivating learning (2 to 6 teams compete, 3-5 participants per team; total playing time required is 8-18 hours).

If played in sequence one can simulate the start up of a company and writing a business plan with SysTeamsRybi, simulate competition on markets and general management issues with SysTeamsBusiness and then simulate a change management process with SysTeamsChange. All three games are used in university education as well as for companies training and consulting purposes. Students do not need specific pre-knowledge in management, business-plans and start-up processes or in change management. All games can be used for absolute newcomers in the topics that are simulated in the game. Nevertheless also experienced executives can use the games by applying more complex scenarios, tasks and procedures and more challenging goals in the gameplay.

EXAMPLE: SYSTEMSCHANGE® - METHOD, GAME ELEMENTS AND CASE STUDIES OF APPLICATION

The gaming simulation SysTeams Change® is constructed on a modular basis and takes 2 to 5 days depending on the stipulated training requirements (Kriz & Hansen, 2006). As well as for training it can also be incorporated into consulting processes and be used in the course of real life changes that continue for some time (see below). The 4 to 6 participants slip into the roles of a team of consultants or a “change agent team” (it is being possible to have several teams playing in parallel), and they have to make joint decisions, which refer to the development of a simulated organization. While doing so they receive not only substantiated background information about ways and means of intervening but also about typical problems (resistance, dealing with power, etc.) that can occur in an organizational development process.

Considering the state of development of the simulated actors concerned, their degree of motivation and forms of resistance, the “right” measures have to be planned and implemented, keeping budget constraints in mind. Overall the actors being simulated should be accompanied from the shock phase, over the stage of rational insight and emotional acceptance through to the integration of the change (due to an underlying 7 step model of psychological change phases). The gaming simulation is flexible, because every action and practice module can be chosen as reinforcement as the team thinks fit, and further customized actions and modules can also be integrated into the gaming simulation model. If required, the features of the

organization from which players come can also be built into the gaming simulation model and the simulation. Besides the relationship to real case studies and research results, the gaming simulation has a theoretical basis, since approximately 25 current theories about organizational development with their cross-connections are simultaneously simulated. These theories and research studies can be then possibly processed with additional modules for reinforcement.

As a type of gaming simulation it can be classified as multi-modal medium, a tactile board game with a board, figures and further symbols, in combination with a computer simulation, (based on a Java software computer program). The core elements are:

- An initial story or a game scenario quickly leads the participants into the game events and results in motivated role adoption. Using immediate feedback texts the story is then continued on the basis of the players' decisions. The game stays generic enough for the participants to easily project their own experience of topics that arise with change into the simulation, so that these can be experienced again and relived and actively exchanged with the team members.
- The various simulated groups of actors are presented in various colours on the edge of the board (e.g. red for the management, orange for the special policy departments, yellow for the secretaries, green for the administration and distribution, blue for production, lilac for support, grey for the customers, black for suppliers). Every simulated actor is given a name and a function and in this way the business areas are further defined and differentiated (e.g. in the production by the manager, over the foreman and worker up to the apprentice. At the same time, a worker is a member of the works council, etc.).
- On the edge of the board there are also squares on which the simulated actors can move. For this purpose there are figures in the appropriate colours in order to symbolize each individual simulated actor. Circular segments on the board illustrate a total of seven psychological phases of internal change progress of the simulated participants that is directly shown on the board. It is an aim of the game that the simulated actors move from the edge (shock phase) towards the middle and then into the centre circle (integration). The physical appearance of the actors is also illustrated as comic figures in an information sheet.
- As well as the psychological progress and the overcoming of resistance, the progress of the organization in reshaping itself is also shown. Whenever particular milestones of a change process are attained, the players receive a ring that is stuck on a post. Depending on the organizational development that underlies the gaming simulation, up to 7 rings can be gained.

- Tokens symbolize the limited resources of the simulated organization. Only a limited number of resources – time, money, etc. – may be spent per round and every action costs resource points).
- Depending on the version, the 40 to 50 actions and means of possible intervention (and their description, costs, etc.) for the change process are printed on big cards. For those taking part there are pinboards on which to pin the cards and then cluster them in a meaningful way that reflects their categories and in order to be able to plan interventions in the course of time.
- All the team players' decisions are documented on paper decision sheets. For those conducting the gaming simulation a computer program is available to evaluate the game in which i.a. the current actions and the actors selected for this purpose are entered and that calculates and automatically produces and prints out the appropriate feedback. These are not deterministically but dynamically generated and are based on changeable probabilities. The players can take this feedback to their boards and evaluate them as a group, and in the case of successful interventions they can move the simulated actors towards the centre of the board.
- The participants do not react with the computer program directly, so that they communicate more intensely with each other. They sit round the edge of the board and in this way they have eye to eye contact when speaking. The board and the other elements are the focus of attention. The tactile elements lead in both senses of the word to a better “grasp” of the connections. The immediate feedback, the progress

made by the simulated actors on the board and the visible increase in the number of rings on the posts supply cognitive orientation and have at the same time a motivating function.

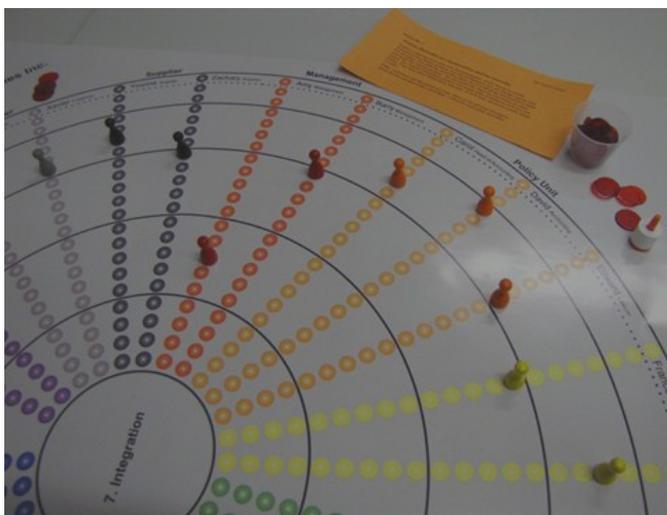
One group that could find the gaming simulation SysTeamsChange® interesting are organizations planning or implementing change, especially if they want to prepare for steering and change project teams. The gaming simulation is also suitable for the training and further education of consultants or trainers, coaches or change agents who accompany organizational advisory processes in order to support organizational change professionally, as well as for persons who are or will be top managers in organizations.

The gaming simulation is used by universities and technical universities in many education related ways. Depending on the target group the focus varies.

Whereas, for example, in the Bachelor course of the Technical University of Vorarlberg specific theoretical aspects and their interaction plays a major role, in the Executive HR Master of the Ludwig Maximilian University of Munich the simulation is employed with a greater degree of complexity. This specifically reflects the roles of the HR managers and top managers taking part and is due to the specific problems encountered during the many years of their professional experience.

The gaming simulation is also used in organizations with various aims. In a Swiss school in the canton of Zurich as well as in a large German insurance company the gaming simulation was carried out with managers and change organization teams, and after the simulation was over reflections were made on impending changes in the organization and conclusions drawn and decisions made

Figure 1
The gaming simulation *SysTeamsChange* with some of its elements in action
(student group of the technical university Vorarlberg)



about specific steps conducive to change. In the school this then led to the accompaniment of the planning and the implementation of the school development process. In the case of the insurance company the complete internal standard process for accompanying change processes was analyzed, redefined and realigned.

For this type of post-simulation utilization the emphasis is on the analysis of own processes and instruments and the diversion of fresh aims and strategies for the organization in question. By means of the gaming simulation there is a new awareness of the room for manoeuvre available and there arises a sort of “road map”, a common understanding and a common language based on the experience with the simulation. Mental models and perspectives are exchanged and brought into a common shared vision with specific change ideas for the own organization.

In some cases there is subsequently continuing and more intensive organizational counselling, in the course of which the gaming simulation can then be used for other groups who are actually involved. So for example, after the simulation the steering committee for the school development prepared with the gaming simulation, and in the insurance company managers are now further qualified using the gaming simulation.

The gaming simulation is used especially for further manager training, mainly in internal workshops with managers at the same level in the hierarchy. A classical approach is to run through all the higher managers up to a pre-established level of the hierarchy – e.g. first and second management level in a large Austrian insurance company as a general internal further education program. Another frequent area of application is the preparation of top managers and other participants for specific changes that are imminent, as in the case of an Austrian bank and a German logistics company.

Besides top managers, the gaming simulation is used for personnel and change managers from companies, such as a worldwide Dax industrial company and one of the largest international reinsurers. With this approach the focus of the reflection in the debriefing is from the perspective of the actual role in the company and one's own pattern of behaviour. Personal transfer reflections are carried out with those taking part that serve to check and improve their approach in setting up change processes. The systematic formation of change processes and the knowledge of change tools and methodologies, the perception of and the dealing with the resistance and motivation of those participating and the analysis of the systematic connections of a learning organization are here the possible components of the reflection, which can possibly be continued by coaching.

DEMO-PLAY AT ABSEL 2012 CONFERENCE

When applied in education or training each of the three games including debriefing and additional transfer-modules need about two full days of seminar time in total. At ABSEL 2012 we propose the following schedule for the 90-minute session (see below). We focus on SysTeamsRYBI and SysTeamsChange as the sequential play of these games is divided into several short(er) acts / steps of play and it is therefore more easy to show and experience some of these single acts / steps as an interactive example and still gain a good idea and experience of the whole game through the session. For SysTeamsBusiness we will only make a very brief introduction in front of the game materials.

- a. Brief overview of games (5 minutes)
- b. Showing core elements of SysTeamsRYBI®, game board, cards, handbooks, tasks and procedures for players (5 minutes)
- c. Demonstration of SysTeamsRYBI® with some interactive demo game play (10 minutes)
- d. Feedback and short questions of participants, showing an example schedule of full play and debriefing structure with students (10 minutes)
- e. Short explanation of SysTeamsBusiness, game board, game pieces etc. (5 minutes)
- f. Feedback and short questions of participants, showing an example schedule of full play with students (5 minutes)
- g. Core elements of SysTeamsChange®, Game Board, Game Pieces, Action Cards, Handbooks, Software (10 minutes)
- h. Interactive Demonstration of SysTeamsChange® with some play experience - simulated decisions by participants and results of the simulation (20 minutes)
- i. Feedback and short questions of participants, showing an example schedule of full play and debriefing structure with students (10 minutes)
- j. general discussion (10 minutes)

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