

CHANGE MANAGEMENT IN INDUSTRY IN THE VUCA TIMES

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Abstract

The purpose of this publication is to reflect upon finding an optimal method that will allow to conduct changes and adapt the industry to current environment dominated by the COVID-19 pandemic. The intentionality of these reflections is conditioned by the volatility of closer and further environment of each modern enterprise. In VUCA times, volatility, uncertainty, complexity, and ambiguity become the synonymy of economy and business. Choosing a method that counteracts, support or set a direction in such an environment is necessary.

Key words: Management, Critical Path Method, Gantt Diagram, Kaizen Concept, VUCA times.

1. The state of the VUCA in the industry

In current times, managers or company owners face a great challenge, which originates from the spread of COVID-19 epidemic to the whole world and, in consequence, transforming into a pandemic. This challenge consists of adapting to numerous restrictions, prohibitions, and injunctions, as well as taking into account the well-being of employees and society in general when conducting a business activity. Nonetheless, the most important aspect is the correct, cost free adaptation to valid rules and so-called “new economic order” if possible.

What once was a daily occurrence nowadays is not so obvious and changes and process focused on transforming enterprises not only cannot be avoided, but also are necessary to ensure the survival of numerous companies. Ensuring the continuity of orders, production, or other manufacturing processes requires constant learning and improvement of processes. Hint received from employees, proper planning, or securing against the first symptoms of crisis are slowly becoming the norm in present enterprises. The enterprises “crave” changes and their owners and managers must meet these tasks. Properly selected methods, which support, cause, and determine a change in an enterprise are helpful in adapting companies in times of change. When comparing the past and present management, one can draw conclusions that vibrating environment in current times already becomes a standard that is continuously in force. Each organisation should be ready to change itself if it wants to adapt to dominating changes. This process must start at the organisational foundations and must deeply penetrate the organisational cell, so that the organisation can utilise the whole complexity of change management process.

2. Change management in an organisation

At the beginning we should answer the question what this change is and how it should be approached. How it should be managed and directed in order to give a priorly selected result and enable the enterprise to adapt and survive in modern times.

Change – a fact that someone or something becomes different than it was so far, replacing one thing with another thing.¹ In accordance with the meaning of “change”, we can take into account all intra-organisational transformations that occur within a company as a result of human interference or without such interference. Numerous changes occur autonomously outside of an organisation and therefore force it to implement changes, adapt to them, or to transform.

An organisational change is an assemblage of transformations important for a company. Such modifications, that is, changes of the existing enterprise arrangement according to set procedures, can concern its various parts. A change simultaneously envisions the results of said transformations. A change occurs in all places, where occurs a need to implement it. It is also an ability to adjust the pace of changes and their implementation methods to the constantly shifting feelings of company employees.²

A change can concern various aspects of enterprise’s business activity. A change is not a single event, the results of which are visible overnight. It is not a single event, after which solutions that previously were not viable suddenly find a use. In the process approach, a change must occur in reference to a pragmatic approach. The whole example should come up from “top”, that is, from the management staff. The complexity of the whole process is humongous and therefore changes must be done deliberately and thoughtful. In order to implement a change, a problem should be identified and provide an answer why given change is necessary. It should also specify a point, in which an organisation should find itself after conducting the change management process. This also requires preparing a management plan, according to which an enterprise will move. After changes are implemented, the process should be managed in a way that makes implemented changes or improvements permanent. Such a pragmatic approach guarantees the success of changes implemented in vibrating environment while taking into account the intra-organisational factors that force an organisation to manage a change.

At this point, we should be aware that the position taken by a given organisation in the environment is not given to it forever. We should remember that here in force are both the right of entropy (all systems have a natural tendency to fall) and the need to take the top position in the environment, as well as improving this position in relation to other systems. Change is required in such case, which is understood as fight against entropy and improvement of taken position.³

More and more often managers treat change not only as a change, but even see its necessity. The existence of an organisation is shaped in a so-called **triad: selection - compensation - change**⁴.

¹ <https://sjp.pwn.pl/slowniki/zmiana.html>

² Doppler, K., Lauterburg, C., & Egert, A. C. (1998). *Change Management*. Editorial Ariel.

³ Doppler, K., Lauterburg, C., & Egert, A. C. (1998). *Change management*. Editorial Ariel.

⁴ Rasiel E, Friga P. (2004) *The McKinsey Mind*, K.E.Liber s.c. Publishing House Warszawa

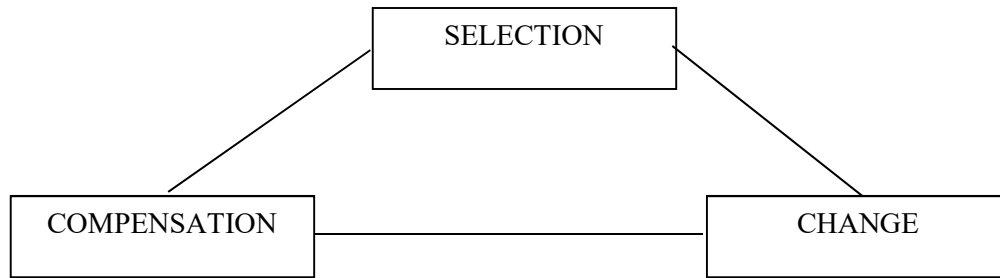


Fig. 1. Organisation existence diagram

Source: own elaboration based on Rasiel E, Friga P. (2004) *The McKinsey Mind*, K.E.Liber s.c. Publishing House, Warszawa

These elements create the three basic pillars of a company's existence. Organisational changes can be divided into quantitative and qualitative changes. The former indicates differences in the size of one or several parameters while the latter point to new behaviours, properties, and reactions of a distinguished system. The development is regarded to in categories of achieved positive changes that concern a given goal. We speak about growth or degradation when we deal with quantitative changes.

The ability to envision changes is a problem created by their implementation. Because of that, the changes can be divided into reactive and proactive. Reactive changes are conducted by way of analysing and diagnosing. In order to find the best solution, first we need to recognise the current state and possible weaknesses of a company. The speed and relatively low costs are the essential advantages of reactive changes. Unfortunately, it has been noticed that costs of reacting grow along with the necessity to change becoming more and more obvious. Therefore, it is worth to take care of appropriate time to implement changes because the longer we delay, the lower its effectiveness is.

Proactive changes consist of constructing a model based on a synthesis first and then searching an optimal solution. The model is created as a prognosis and it does not constitute as a reflection of any specific object. It is a result of creative thinking and researching development tendencies. Because of that, the proactive change can be utilised only in the future. Thus, it is a heuristic process. In this case, already existing phenomena and objects can be adopted as a base in a restricted scope.⁵

After fulfilling the first conditions concerning changes, namely, all activities concerning workforce, the next stage of change management and its implementation in an enterprise should be commenced. However, we should remember that this process should be organised, clear, and permanent. As it has been mentioned earlier, we should act according to a previously elaborated diagram. A change cannot be temporary and decision about implementing it must be well thought-out.

Change management can have various scope ranging from permanent improvements covering small current changes in ongoing processes up to radical and essential changes, including organisational

⁵Todnem, R. (2005). *Organisational change management: A critical review*. Journal of Change Management, 5(4), 369-380.

strategy. Change management can be reactive or proactive. It can be caused by a factor in organisation's external environment, for example, in economic, political, legislative, or competitive area, or it can be a reaction to something under processes, structures, or events within an organisation. It can also be implemented as a remedy, for example, in anticipation of future unfavourable economic circumstances. Usually change management can be divided into five steps:

- recognising the cause pointing to a need for changes,
- specifying end point or "where we want to find ourselves",
- change performance planning,
- implementing changes,
- ensuring that the changes will be permanent.

An effective change management covers changes at personal level, for example, changes in mood or procedures; therefore, the performance of effective changes requires staff management skills, such as motivating. Other factors, which have a great impact on successes in change management, are: leadership style, communication, and uniform positive approach to changes among employees. Business process restructuring is one of change management types.

It covers transformation of processes within an organisation in order to improve the operational effectiveness. Change promoters are such people within an organisation, who are leaders and masters of change process. Along with the increasing pace of changes in business environment in 1990s and beginning of 21st century, they became acceptable as business life elements and were introduced in management textbooks.⁶

3. The impact of environment on an organisation

A significant element taken into account in numerous organisation models is environment, which in the most general approach simply means an external environment of organisation's operation. In the management theory, next to external environment is sometimes identified an internal environment, which can be identified directly with an organisation itself⁷, and the base criterion for its separation becomes a conviction about high degree of organisation's ability to control elements of internal environment⁸.

However, the separation of "internal environment" term is debatable and therefore this operating dimension should be rather defined as "organisation's internal environment".

The elements and processes occurring in internal environment of present organisations were described in detail in other chapters of this textbook and therefore reflections in this part will solely focus on the characteristics and meaning of internal operating environment of an organisation. The idea of (external) environment originates from systematic concept, which highlights the holistic nature of

⁶https://mfiles.pl/pl/index.php/Zarz%C4%85dzanie_zmian%C4%85

⁷ A. Goyal, Business Environment, V.K. Enterprises, New Delhi 2006, p. 8.

⁸ H. Pathak, Organizational Change, Dorling Kindersley, Noida 2011, p. 10.

organisation separated from external environment, as well as numerous and multi-directional interactions simultaneously connected with it⁹.

An organisation's environment can be defined as an assemblage of conditions and mutual dependencies of various elements (including other organisations), spheres, phenomena, processes, and trends that are not part of the reviewed organisational system and remain outside of its direct control, but are related to it, that is, influence given organisation and/or are subject to influence of behaviours, undertaken actions and decisions, management processes, structural solutions, and development perspectives of a given organisation¹⁰.

The activity of an organisation, in particular activity analysed in the dynamic approach, cannot be reviewed without taking into account its relations with environment that to a great degree decides about its success or failure. For that reason, the environment constitutes as a specific climate and set of conditions, under which an organisation runs its activity, that on one hand impose certain restrictions and on the other hand – create opportunities and influence the ability to operate and development perspectives in an essential way¹¹.

The external operating environment of modern organisations is characterised by certain specific features, which could include:

1. Structure that is related to occurrence of specific elements, spheres, phenomena, processes, and trends in the environment and their mutual relations and dependencies. The supplement of this feature, which is reviewed from the organisation's point of view, is level, distance, and direction of interactions occurring between the organisational system and its external environment. This approach constitutes as a base for separating closer and further environment.
2. Complexity that expresses number, complexity level, and diversity level of elements occurring in the external environment. Mutual connections and relations occurring between specific environment elements, dimensions, and planes also become an important element of this feature. This feature constitutes as a base for classifying external environment into simple and complex environment.
3. Volatility, which is expressed through speed and dynamic of changes occurring in the external environment. This feature serves as a base for separating specific environment types by level and scope of occurring changes.
4. Uncertainty resulting from environment's volatility and instability and related to specific difficulties in envisioning future shape and potential of external environment.
5. Potential that is related to the environment's ability to create organisations with ability to last, regularly grow, or develop. In this approach we can talk about low or high potential environment.

⁹ M. Bielski, *Organisation and management theory basics*, C.H. Beck Publishing House, Warszawa 2002, p. 38-43.

¹⁰http://www.matejun.com/pubs-pl/2013_Matejun_Nowicki_Organizacja_w_otoczeniu_od_analazy_otoczenia_do_dynamicznej_lokalizacji.pdf

¹¹ : J. Brózda, S. Marek, *Environment of an organisation*, [w:] S. Marek, M. Białasiewicz (red.), *Organisation teaching basics*, PWE Publishing House, Warszawa 2008, p. 87.

6. Occurrence of opportunities and hazards, which constitutes as instantiation of environment's potential in conditions of its volatility and complexity. Here, the company faces the challenge of making decisions concerning reaction to appearing opportunities and hazards.
7. Multidimensionality expressed in various impact of specific environment elements on specific organisations. This feature is related to managers viewing external environment in a subjective way, where some of them will see given phenomenon or trend as an opportunity while others will see it as a hazard to organisation's operation.
8. Space, which is related to physical expanse of environment and is bonded with occurrence with specific elements and trends in it, as well as with progress of various phenomena and processes under a specific environment. This feature allows to distinguish local, regional, state, international, or global environment.
9. Time that determines the order of events and intervals between events occurring in the environment's space. On the basis of this feature, we can distinguish past, present, and future environment.
10. Contextuality of circumstances that is expressed in the necessity to review the environment in a given context. The external environment of an organisation is always related to specific conditions occurring in space and time and therefore it is diversified, e.g. depending on a country or region. This creates a necessity to take these specific conditions into account when analysing interactions occurring between organisations and their external environment¹².

This means that each organisation is an open system that interacts with environment in numerous, multidimensional, and dynamic ways, which consist of, among other things: collaboration, competition, cooperation, and exchange of material and immaterial goods, including energy, information, and cash¹³.

In a turbulent environment, which is also defined as the VUCA state, basing management on the process approach can be a solution that improves the operating effectiveness¹⁴. The most important factor in such management is separation into specific elements in such a way that they are easy to understand and assimilated by employees. This constitutes as a foundation for building actions and relations as a team and within an organisation, which translates into optimisation of actions with reference to a process. The process approach is extremely important as it is a real indicator of achieving effectiveness growth in a modern organisation, which is located in the VUCA environment. A significant role in the process management is played by the process element itself as it can be used to present every single action or collection of such actions. The result of such process, from a certain possessed initial

¹² M. Bielski, *Organisation and management theory basics*, C.H. Beck Publishing House, Warszawa 2002, p. 72-78; R. J. Reddy, *Business Environment*, APH Publishing, New Delhi 2004, p. 1-2; C. Nieuwenhuizen, D. Rossouw, *Business Management: A Contemporary Approach*, Juta and Co. Ltd, Cape Town 2008, p. 11; T. Chi, *Measurement of Business Environment Characteristics in the US Technical Textile Industry: An Empirical Study*, "Journal of the Textile Institute", vol. 100, no. 6/2009, p. 546-548.

¹³http://www.matejun.com/pubs-pl/2013_Matejun_Nowicki_Organizacja_w_otoczeniu_od_analzy_otoczenia_do_dynamicznej_lokalizacji.pdf

¹⁴ Why is it worth to implement process management? Impel Group, 1st July 2018.

value that is an investment we will receive a result, which is the said investment enriched by added value that is the result of this process. Thanks to processes, we can receive a certain image of whole organisation's operation and in consequence we can quickly react when a need arises.

Process management is an action, which consists of optimising the organisational elements structure due to their impact on creating the final value of result of separated processes¹⁵.

From among the available management methods used in enterprises to more effectively and efficiently manage an organisation, its resources, and its processes, for example: Lean management, Total Quality Management, Business Process Reengineering, Gantt Diagram, Critical Path Method, Knowledge Management, Quality Management, Quantity Management, Six Sigma, Kaizen, etc.

The author chose these methods while adhering to theoretical knowledge and experience in the field of management. On this basis, the author indicated four criteria: process planning, process monitoring, process control, and process improvement. All of the criteria above are met by the following methods: Critical Path Method (CPM), Gantt Diagram, and Kaizen Method.

The methods are discussed according to the order provided above.

4. Critical Path Method (CPM)

This method belongs to the group of deterministic network planning techniques. Its foundation consists of building a specific type of a network graph that presents activities and events comprising a project and using this graph as a base for calculations. Thanks to those calculations we acquire the project execution plan.

This specific network type is known as dependency network or network chart. This network is based on two-point network models, that is, models where activities are represented with the help of chart arcs and events – with the help of graph nodes¹⁶.

This method is used to plan and control projects and is tightly related to the design method. An important determinant of this method is technological familiarity with the process and knowledge on organisational relationships.

Exemplary projects, which utilise this method, are: construction investments, and projects, renovations, and projects, in which complex unit products, such as: airplanes or space rockets, are manufactured.

The CPM method was developed in the U.S.A. in years 1956-1957. Its authors were J. Kelley and R. Walker, employees of the DuPont Company. They developed this method in order to streamline works at neoprene production. The engineers were disturbed with the big number of downtimes during machinery maintenance. By applying the CPM method, they could reduce the downtime from 125 to 93 hours (they saved 32 hours!!!) and, as a result, they could improve the economic results. This method

¹⁵Grajewski P. (2007). Process organisation, Polskie Wydawnictwo Ekonomiczne Publishing House, Warszawa

¹⁶M. Trocki et al. 2003, p. 161-162

constitutes as a graphic presentation of an organised action, which aims to carry out a set goal in set time using specific resources and budget.

The undertaking consists of a finite number of mutually related activities that are conducted in a specific order (their durations are known)¹⁷:

- Calculating the duration of earliest possible activity commencement dates (we carry out the calculations by going forward in the chart). *Caution*: The CPM method assumes that durations of specific actions are precisely known (deterministic).
- Adopt the earliest possible date for initial event (first on the left) equal to 0.
- Calculate the earliest possible date of commencing the subsequent task as the earliest possible date of occurrence of previous event + duration of action leading to that event.
- Repeat the described steps for all tasks.

Calculating the latest allowed dates of occurrence of specific events (we carry out the calculations by going backwards in the chart):

- The latest allowed occurrence date, which is equal to the earliest possible occurrence date, should be assigned to the final event (last on the right).
- Calculate the latest possible occurrence date for specific tasks starting from events closest to the final event (the latest allowed occurrence date - duration of activity leading to this event) (*Caution*: when a certain event is the beginning of two or more activities, the latest allowed event occurrence moment will be equal to the minimum of appropriate differences).
- Repeat the described steps for all tasks.

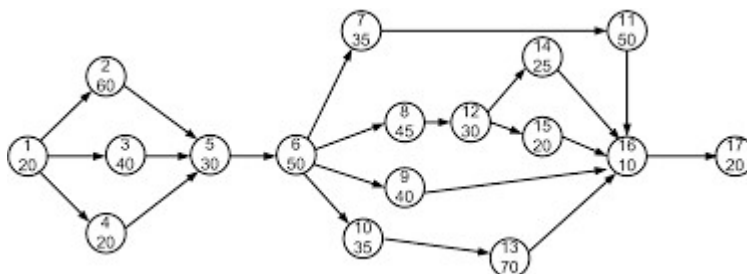


Fig. 1. Designation convention illustration

Source: M. Urbaniak, *Scheduling IT projects using critical chain method on the basis of blurred competence characteristic*, UEK Research Bulletin, Poznań 2012.

The critical path is the longest running sequence of all possible sequences of tasks chronologically ordered in such a way that the next task cannot commence until the previous task is completed (sequential tasks). The critical path technique knows the date of commencing and concluding a project, the order of specific tasks, and their mutual relations. The technique also knows the durations of actions that must be carried out in order for specific events to occur. An event cannot occur until all concerning

¹⁷A. Grześ 2014, p. 207

it activities are completed. The order of specific events and action performed between them is defined by technology and organisational relationships.

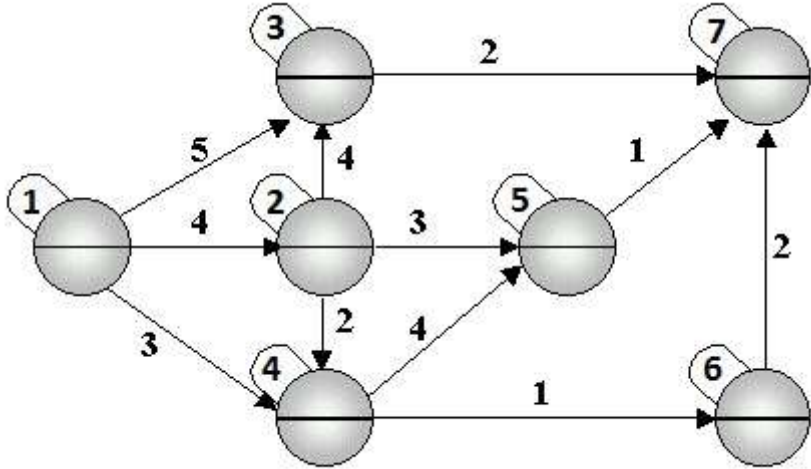


Fig. 2. Structure of undertaking along with execution times of specific operations (actions)

Source: Kisielnicki J. (2011). *Project management. People - procedures - results*, Oficyna Wolters Kluwer business Publishing House, Warszawa.

Let's assume for further reflections that we used graph (Fig. 2) to save the structure of our undertaking along with execution times of specific operations (actions).

The first step in determination of the critical path is determination of earliest possible moment of occurrence for each event. When determining the critical path, it is adopted that the earliest possible moment of occurrence for initial event no. 1 is equal to 0. The earliest possible moment of occurrence for subsequent event (e.g. 2) is equal to the sum of earliest possible moment of occurrence for event 1 and duration of action leading to event 2 (event 2 will occur after 4 units of time). Subsequent earliest moments of occurrence of events are determined while going from the start to the end of the chart (Fig. 3).

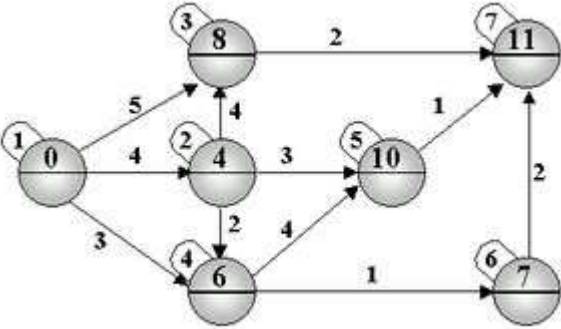


Fig. 3. Calculation results for the earliest possible dates

Source: <https://mfiles.pl/pl/index.php/CPM>.

In the next step we calculate the latest allowed moment of occurrence for specific events starting from the events closest to the final event, where to the final event itself should be assigned the latest allowed moment of occurrence that is equal to the earliest possible moment of occurrence (event 7). Subsequent latest moments of occurrence of events are determined while going from the end to the start of the chart (Fig. 5). When a certain event is the beginning of two or more activities, the latest allowed event occurrence moment will be equal to the minimum of appropriate differences.

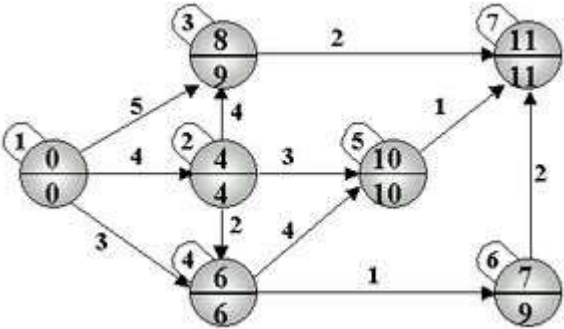


Fig. 4. Calculation results for the latest allowed dates

Source: <https://mfiles.pl/pl/index.php/CPM>.

The most important and final element of this method is determination of a critical path, which we define as a sequence of actions, for which the sum of time is greatest from all possible paths connecting the initial event with final event. Actions located on this path do not have a time reserve (the latest allowed date - earliest possible date)¹⁸.

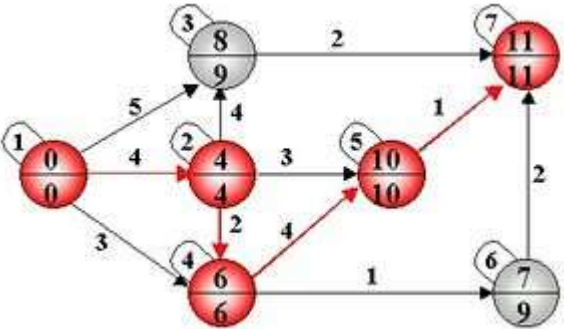


Fig. 5. Determination of critical path

Source: Kisielnicki J. (2011). *Project management. People - procedures - results*, Oficyna Wolters Kluwer business Publishing House, Warszawa.

¹⁸J. Kisielnicki 2011, p. 251

In the reviewed case, the critical path progresses through events 1-2-4-5-7 (it is marked with red colour in Fig. 6). The critical path's length is 11 units (of time). The project manager should pay particular attention to events located on this path. Delay of a single event will cause delay in the set project conclusion date.

As it can be seen in Fig. 5, action (1-4) connects critical events, but it is not a critical action itself. Delay in its execution does not result in delay in the execution of whole undertaking¹⁹.

5. Gantt Diagram

This method is correlated with the Critical Path Method. The diagram is extremely helpful not only while planning an investment and carrying out essential tasks, but it is also a method used in project management. The Gantt Diagram is a graphical method of planning and control.

Planning and coordinating the progress of various actions in a time period play a significant role in creating and operating an organisation. The Gantt Diagram is used to plan multi-entity actions at both team and group level.

They present the consequence of subsequent events while also taking into account tasks carried out concurrently. Thanks to this technique, we can also control the execution of planned undertaking.

The basic goal of the diagram is to support the project manager's work by highlighting relations between tasks and impact of potential changes on the whole project.

It also allows to conduct a simulation, which enables to determine proposed changes for specification, availability of resources, and set dates. The Gantt Diagram also play an essential role during optimisation of first "realistic" version of project plan.

Henry Laurence Gantt used the personally developed chart for the first time in 1917 to present the production plan in a graphic form. On a typical Gantt Diagram, rows contain work positions while columns mean units of time. The arrangement of events on the chart is most often presented in a version planned before the commencement of action and real version applied to the chart over time. The real development of Gantt Diagram have not occurred until the age of computers, which also enabled presenting very complex dependencies and plans in a graphic form.

The diagram's progenitor was Pole Karol Adamiecki, but his graphic method of analysing and planning was not popularised because he did not publish his accomplishments (elaboration in 1896, publication 35 years later).

The Gantt Diagram can be used not only to plan and control plan execution, but also to take into account the volatility of task execution process by applying appropriate designation system.

In case of work efficiency chart, the analysis is done on the basis of real records supplemented with disturbance designations (e.g. absence of employee, lack of materials, lack of guidelines, machinery

¹⁹ <https://mfiles.pl/pl/index.php/CPM>

renovation, lack of energy, lack of tools, lack of contractor's experience, holidays, meetings, strikes, lack of contractor's qualifications, lack of order).

The Gantt Diagram creation is divided into 5 stages:

- 1st stage: decomposing an undertaking into stage goals or residual goals,
- 2nd stage: defining duration of an undertaking and defining execution of stage and residual goals,
- 3rd stage: determining the order of carrying out stage and residual goals and determining dates of their commencement and conclusion,
- 4th stage: determining location, in which the goals will be carried out,
- 5th stage: expressing all performed activities in graphic form.

The task execution time in Gantt Diagram is presented in the form of a rectangle place on a linear scale. Its left edge corresponds to beginning of a task while its right edge – its conclusion. The scale can be changed according to needs so it can show days, weeks, months, etc.

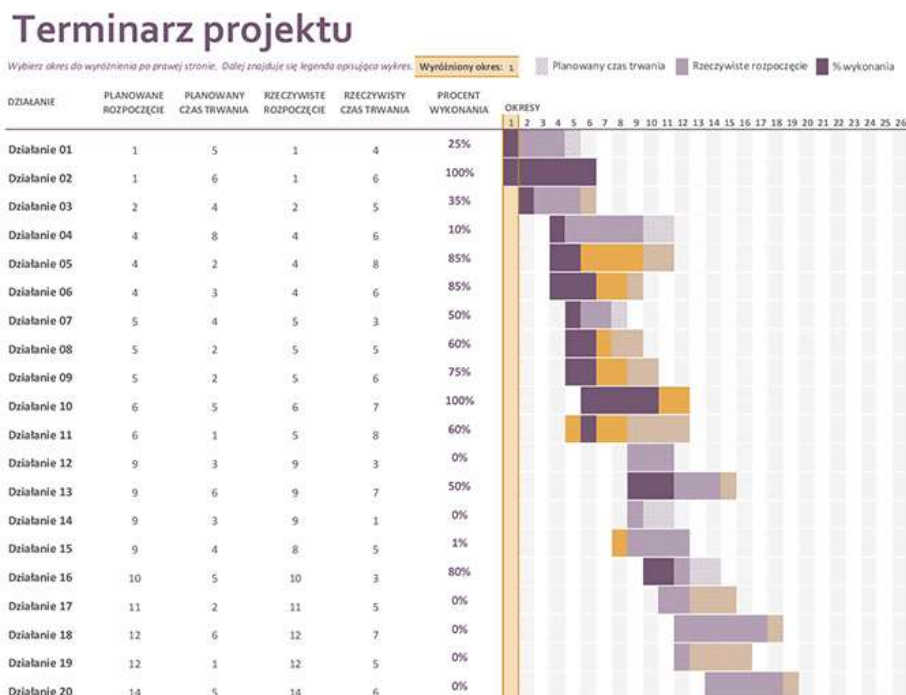


Fig. 6. Example of Gantt Diagram

Source: Frąckiewicz R., Krzemiński M., *Analysis of possibility of using task ordering rules utilised in industrial production in a construction scheduling WIL no. 19, Warsaw University of Technology, Warszawa 2011.*

Next to the Diagram can be found information related to the presented project, i.e. task type, task name, duration, commencement and conclusion dates, preceding tasks, resource name, costs, etc. Usually, Gantt Diagram also contains so-called milestones. Milestones define events corresponding to specific network nodes, which are ground breaking (most important) in the project execution schedule. Milestones are marked in Gantt Diagram using a special symbol usually combined with a description.

The advantages of this method mainly result from:

- ability to automatically determine critical path,
- clear presentation of task schedule,
- ability to constantly control the carried-out undertaking and make appropriate corrections,
- flexible form of presenting data concerning selected tasks.

Schedule preparation is done by marking bars meaning actions with a given duration on horizontal chart while taking into account the scale adopted for time axis. These actions are placed in appropriate order that takes into account cause-effect dependencies characteristic for cooperation structure of a project. The location of bars presenting separate actions allows to read their commencement and conclusion dates and determine a critical path, as well as project milestones. The project milestones (or checkpoints) are coordination and control points for partial project results. Typically, they are marked on schedules using reversed triangle or rhomb.

They determine critical points in execution of specific stages in the whole project and are vital to its success. This raises the question “how many such points should be on the chart?”. Source literature indicates that the chart should contain at least two milestones (at the beginning and end of execution).

No specific number is provided, but it is proposed to set such points at relatively equal time intervals, e.g. after 15-20%, later after 50%, 70-80%, and 95% of total execution in order to improve and effectively implement a project. However, it has been noted that the number of milestones will depend on the size and complexity of carried out project. The bigger and more complex the carried-out project is, the more milestones should be marked on the chart in order for earlier control of actions conducted in the project to contribute to earlier detection and correction of any and all abnormalities and leading to a successful completion. However, too many milestones (e.g. after each action) increase the workload dedicated to control this solution and may cause the occurrence of disturbances in current task’s execution.

Determination of milestones ends the stage of determining project dates and allows to complete the elaboration of action schedule for conducted undertaking in the form of Gantt Diagram and determine the critical path²⁰.

6. Kaizen Concept

This method originates from Japan. In Japanese “Kai” means change while “Zen” means all. It is a concept of constant improvement.

The Kaizen Concept is defined as business strategy that consists of engaging all employees of organisation into constant search for ideas to improve all organisation fields regardless of their organisational level. This aims to eliminate all current problems, prevent their occurrence in the future, and create innovative solutions. Kaizen is not only a management concept, but also a part of Japanese

²⁰ Jędrzejczyk, Kukuła et al., 2011, p. 193-194

culture present in numerous aspects of life. It refers to a constant pursue perfection in private life, both family and professional aspects of it.

In enterprises utilising the Western management style, it is adopted that employees should utilise work execution guidelines while the Japanese style, despite existing and applied standards, it is natural for employees to submit solutions aimed at improvement.

The method of management accepting propositions is also important - in Japan, superiors fully accept an employee's right to submit ideas while in the Western style they are often treated with reluctance and suspicion. Aside previously mentioned cultural differences, one of reasons for such treating the idea of constant improvement is the focus of Western enterprise managements on results.

The implementation of time and money consuming, but visible innovation is viewed significantly better than hundreds of small improvements, even if the investment result is short-term. Approach of Japanese people is different as among them dominates focus on processes and through them - on results. They see a significant source of saving organisation's resources in small changes that often do not carry any costs. The activity of Japanese employees in submitting changes is ginormous. J. Witkowski provides the number of 15 propositions per employee per year on the basis of observations in enterprises.

The Kaizen Concept belongs to the most significant terms in Japanese management model. It creates an atmosphere, in which enterprises can solve their internal problems and which relies on establishing cooperation. The thought process in Kaizen is focused on process and management method instead of evaluating people by the prism of results they achieve²¹.

In order to effectively implement the Kaizen strategy, the following systems should be used in an organised way:

- a. Total Quality Management (TQM) – management through quality, (Management through quality (Total Quality Management, in other words: comprehensive management through quality, complex quality management, total quality management) - approach to organisation management, in which every activity aspect is carried out with reference to pro-quality view. Every employee participates in this approach through teamwork, engagement, self-control, and constant qualifications improvement. The goal is to achieve a long-running success, the source of which are customer satisfaction and benefits for the company and its member, as well as the society.
- b. Just in time – delivery on time, (Just In Time (JIT) [*delivery on time*] - one of techniques used in management through quality that concerns production. It covers a complete elimination of wastefulness by delivering each production process all necessary elements at the required moment and in required amount. The main advantage related to the JIT method is reduction of execution time to a minimum, which brings significant savings related to the reduction of stocks. The effectiveness of implementing the JIT method depends on finding balance between flexibility of

²¹Wawak S. (2004). Quality management - theory and practice, iss. 2, Onepress Publishing House

suppliers and constancy of users at correct engagement of management, employees, and while using advantages of teamwork.

- c. Total Productive Maintenance (TPM) - a completely productive maintenance of machinery (Total Productive Maintenance (TPM) – it is a comprehensive approach to maintaining machinery in the highest productive efficiency. The method assumes that it is possible to significantly reduce time spent on downtimes related to untimely material deliveries and machinery changeover, maintenance, and malfunctions as a result of employee engagement. The result of applying this concept is implementation of corrections in organisation of production hall, sockets, or machinery settings. Simple machinery, which are easy to retool, repair, maintain, and sell if the need arises, is also used numerous times despite the fact that more complex and technologically advanced aggregates are available.
- d. Policy Deployment.
- e. Suggestion system.
- f. Work in small groups.

Implementing and maintaining the Kaizen method in an organisation requires the creation of appropriate conditions, as well as developing a favourable organisational culture. First and foremost, employees should be appreciated and their constant development and feeling of mutual goals should be taken care of. The interest of all stakeholders should be taken into account and acted upon in a long-term perspective. Moreover, the indication of errors and deviations from norm in an organisation should be supported in order to quickly identify the organisation's weak points. Quick actions should be taken after recognising occurring problems, but only after planning a strategy that takes into account known facts and opinions of other employees.

There is a series of techniques used in the management process that utilise the Kaizen concept. These are, among others:

- Classification of productions losses according to cause - losses (Jap. muda) do not contribute to creation of added value and therefore they should be eliminated or limited.
- Endeavour to learn the initial reason for negative phenomena – in case of encountering a problem, we should ask ourselves “why?” 5 times in order to understand the foundation of examined phenomenon as best as possible.
- 5S method

7. Summary

Considering the constantly changing environment and surrounding of enterprises, change management becomes a part of daily occurrence. It is a process necessary to ensure an organisation's survival and ensure profit.

When counteracting all factors that disrupt the work rhythm in an organisation, we should take into account the moment of disruption's occurrence, its environment and place of origin, and whether they

are of endogenous or exogenous nature. When answering these questions and observing the development of situation, we should choose appropriate method that will be used and will be the most effective.

We should also take into account the planning method before commencing each undertaking or while planning a change. In the then management world, there are plenty of methods, which are able to give expected result in execution of tasks when combined with experience.

Nonetheless, is there a single method that is able to comprehensively support the management process? Sadly, it does not exist. We should properly choose methods depending on an enterprise's needs at a given moment. We cannot hold tightly to one method as this can lead to a crisis instead of change. The endogenous factor, which is caused by holding to beaten tracks and not allowing other methods to "speak", is one of factors causing a crisis in an enterprise. Thus, it is necessary to wisely and carefully choose methods according to the occurring situation that is present at a given moment in the closer or further environment, as well as in our company.

The impact of external crisis-genic factors that constantly influence on an organisation can turn out to be problematic in an organisation, in the scope of which Human Resources and workforce management goes towards "beaten" and well determined direction through goals and organisational mission.

Methods presented in article below not only have to protect us from possible crisis, but also help us in change management in an enterprise. However, we cannot declare the dominance of one method over another method. This would be an inappropriate move, which in a longer time perspective would be fatal. When making every decision, we should review numerous methods available in the management assortment and select method or methods suitable for a given situation. Pursuant to the Kaizen concept, the process should be constantly improved. Thus, success is possible to achieve using even the smallest changes.

In order to manage wisely, we should constantly improve ourselves by implementing changes and improving all management and production processes while using numerous methods to do so. We should forge each failure into a lesson and draw conclusions that can be used in future actions in an organisation.

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