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WORK BREAKDOWN STRUCTURE: SIMPLIFYING PROJECT MANAGEMENT

Rutvik Patel Priti Gawande MBA Student PIMR

Abstract:

Project Management is the process of initiating the plan and taking it forward with the team to accomplish the project goals within the given specific time period. Work breakdown structure in project management helps in delegating the different roles and responsibilities to different skills and potentials available in the team. Work breakdown structure helps to break a project work into smaller and manageable tasks, and to track the progress of tasks work breakdown schedule is used. Work breakdown structure plays a vital role in effective project planning, implementing, controlling and reporting.

Introduction:

Work breakdown structure is an important tool of project management which takes bit-by-bit approach to accomplish the large projects with particular moving pieces. The basic purpose of work breakdown structure is to plan the itinerary for the project. Every tasks are scheduled with the respective time period and procedures to follow. Work breakdown structure helps in overall planning so that it would be easy for any project manager to see the progress of the project and can handle the workflow accordingly.

Some widely used reasons for creating a work breakdown structure include:

- ✓ Helps with assigning responsibilities
- ✓ Assists with accurate project organization
- ✓ Shows the control points and project milestones
- ✓ Allows for more accurate estimation of cost, risk and time
- ✓ Helps explain the project scope to stakeholders

Purpose:

The main purpose of work breakdown structure is to separate the whole project into different pieces and elements to control and supervise the time, cost and technical performance at all the steps of project life cycle.

Scope:

Work breakdown structure is an influential tool as well as foundation of constructive project planning, implementation, administration and reporting. Work breakdown structure comprises the work which is to be distinguish, determined, programmed and allotted. Project managers are responsible to consider the important aspects of project and create a work breakdown structure.

Procedure:

> Structure:

Work breakdown structure of a project is a hierarchical decomposition which converts the whole project into pieces. It divides the work into manageable forms in terms of size, time duration, authority and responsibility and accountability. It provides the usual substructure for the constructive planning and controlling of a project. The evolution of work breakdown structure takes place at the beginning of a project and goes with the detailed project planning. To complete the work it consists of all the internal, interim and external results. It integrates all the project tasks and is used throughout the project life cycle to identify, assign and control the particular work scopes.

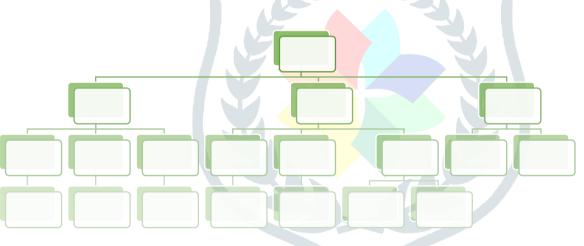
> Responsibilities:

Project team or the project managers are responsible for creating the work breakdown structure for the given project and whole team has to work according to the delegation of work done by project managers.

> Designing the work breakdown structure:

Work breakdown structure is designed to bring out the best results, hence it focuses on outcomes and not an action. The 8/80 rule should be followed, where the work package should take no less than 8 hours and no more than 80 hours of effort. It also includes all the three detailed levels and the work should assign to specific personnel or an individual. Breakdown structure helps in visualize the scope of the project and to complete all the required tasks within the decided time duration.

"Fig. The block diagram of work breakdown structure"



> Benefits and Importance of Work Breakdown Structure:

Work breakdown structure plays a vital role in designing the way of work for projects, programs and initiatives and to produce the positive results. It helps in defining and organizing the required work. It facilitates the quick development of a work schedule by allocating effort estimates to specific sections of WBS. It is also helpful in visualizing the entire project scope. It identifies the important communication points and assigns the responsibilities and accountabilities. It also provides the controlling points which provides the estimation of project costs. It provides the proper allocation of resources and ensures that the resources are used optimum. It is a tool for co-ordination and collaboration with the project team, authorities and other departments which are engaged with the same project by valuing their efforts and investments.

Sometimes it may happen that the project fails to deliver the outcome or the work may not execute as per planned. Project managers experience this often because of poorly designed work breakdown structure. It results in many risks and uncertainties for which the project team may not be ready. Hence, the work breakdown structure should design in such a way that it becomes the cornerstone of planning, implementing, directing and controlling the processes and techniques which is used in managing the project keeping in mind the cost and duration of the project.

Work breakdown structure and milestones:

Projects consists of milestones, outcomes and tasks club together to achieve goals and objectives. It is a basic building block for a project plan. Milestone is a conceptual change or moment in the work of project, where the one task is completed and the another one is to begin. It is used to track the progress of project by highlighting the particular events and its significance to accomplish the goals.

Milestone is a horizontal chart which marks the significant steps of the project. Each achieved milestone brings the project team closer to completing the project. Milestones keep the team motivated and milestone stone chart can also be used to show the progress of project to the stakeholders.

Work breakdown structure need project teams:

The main aim of work breakdown structure is to convert the large project into manageable tasks. Breaking down the project into smaller pieces means the project work can be done simultaneously by different team members which leads to team productivity and easier project management. The main components of work breakdown structure are the organizations, departments and individuals who are responsible for specific task of project, the project scheduled start and end dates and the resources which will be required to proceed the project work.

Project team is formed when the group of people from different expertise comes together to take up the responsibility to perform and complete the different tasks related to project. Project team is the one who plans and design the work breakdown structure of project and understands the overall job and scope of project. Team have to perform the task with the given budget and time duration, and ensures that it matches with the quality standard. The project team have to control the risks and uncertainties, deviations and concerns by communicating the same with project manager and solving the same as a team player.

Facts and Information:

Work breakdown structure is not an organizational hierarchy. Sometimes it mistakenly taken in the shadow of organizational chart while creating the work breakdown structure of project. Some reference material says that each work breakdown structure level be limited to 5-9 elements because that is a theoretical limit to short term memory. It is better to create a logical grouping of planned deliverables than to worry about the limitations of short-term memory of human memory. Techniques can be changed if it not provides the expected outcomes but changes in planned deliverables needs higher degree of formality. If outcomes and actions are blended, changing control may be too rigid for actions and too informal for outcomes. Work breakdown structure is a detailed classification of project scope. Work breakdown structure is not a project plan or project schedule but it is a just a way of converting the project plan into pieces to manage it more accurately.

Work breakdown structure pitfalls: recognizing and avoiding them:

Work breakdown structure is a useful measure for project manager and project team, if it is not taken care of, it can be misused and can ruin the outcomes of project. Work breakdown structure is made on the basis of project scope. The information given in the project scope is 100% there in the work breakdown structure, but project fails if work breakdown structure includes more than 100% of what is in the project scope. Work breakdown structure does not consider the prescriptive methods, it is an outcome oriented. Hence, the methodology and techniques can be changed but the planned outcomes can not be changed.

In designing the work breakdown structure detailed checklist is used by project managers which is also considered as to do list approach. It is a process which takes place step by step for doing every task. Ultimately, this leads to micro management, which fails to attract the team members as it consumes the time and make the procedure monotonous.

Conclusion:

To deliver a successful project, work breakdown structure is an essential tool which helps in constructive project planning and execution. It provides the framework for project planning, cost evaluation, and resource allocation. It is a powerful tool to convert the deliverables into pieces and to distribute the work among the teams.

References

- 1. Project management institute. Project management institute practice standard for work breakdown structures, second edition (2006). ISBN 1-933890-13-4
- Effective work breakdown structure by Gregory T. Haugan, published by management concepts, 2001, ISBN 1567261353
- 3. Carl L. Pritchard. Nuts and bolts series 1: how to build work breakdown structure. ISBN 1-89036712-5.
- 4. Dennis P. Miller, PMP, "Building you Project work breakdown structure, visualizing your objectives, deliverables, activities and schedule". ISBN 142006969-1
- 5. Chaman, James R.2004. work breakdown structure, version 2.01, November, 2004.
- 6. Booz, Allen & Hamilton earned value management tutorial module 2: work breakdown structure, Office of science, tools & resources for project management, Science. Energy. Gov. Accessed 27. Dec 2011
- 7. Gregore T. Haugan. Effective Work breakdown structure. ISBN 1-56726-135-3
- 8. Practice Standard for work breakdown Structures, Published by the Project management institute, ISBN 1933890134.
- 9. Successful project management applying best practices and real-world techniques with Microsoft project by Bonnie Biafo.
- 10. Work breakdown structure: simplifying project management by Neellohit Burghate, International Journal of Commerce and Management Studies, vol. 3, No. 2, June 2018.
- 11. How to plan and organize a project by Michael D. Taylor
- 12. Work Breakdown Structure of Project by T. Rajani Devi, V. Shobha Reddy, March 2012
- 13. Project Management Practices Work Breakdown Structure (Rev E, June 2003)