The importance of Project Management in big projects

The port of Rotterdam is one of the largest seaports in the world. This is not by mistake: the authorities of the port have taken to heart the philosophy that stagnation means decline. For that reason, and to meeting rising demand, the port has seen several expansions in the last decades. One of the major ones is referred to as "The Maasvlakte 2 project (MV2)".

The purpose of the port is to expand the existing facilities and reclama part of the North Sea. As stated by the Port Vision[1]:

"To attract cargo flows for the deep sea-related container sector, the chemical industry and the distribution parks, by creating sufficient extra space, in a sustainable manner, directly on the North Sea, while providing high-quality service by handling cargo efficiently and maintaining standards of safety, cleanliness and security"

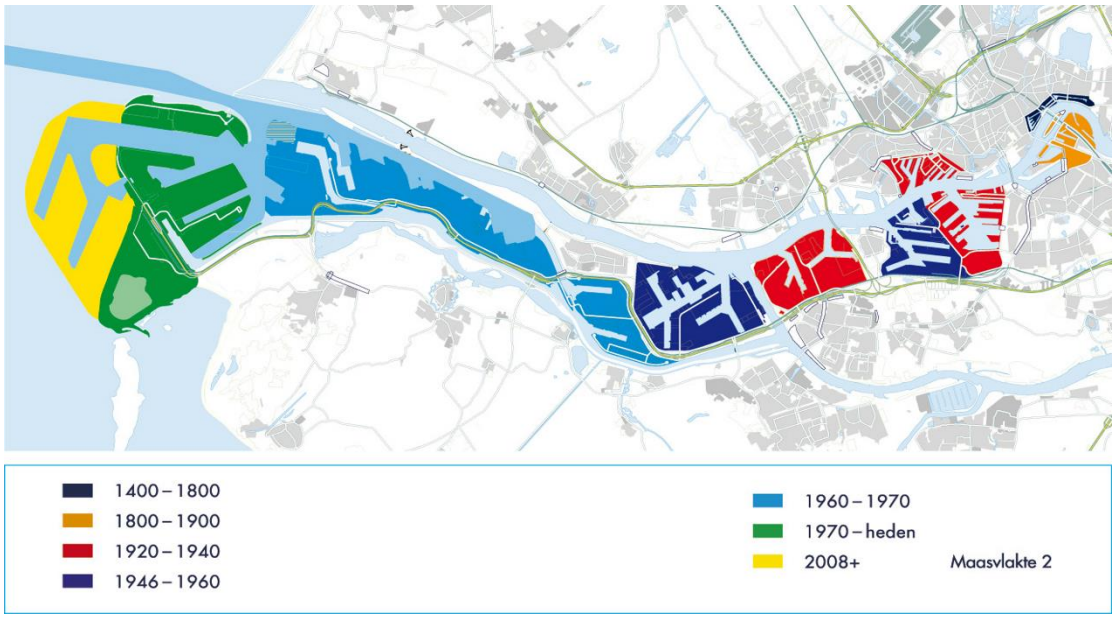

Figure 1: The history of expansions of the Port of Rotterdam[2]

Such an extensive and challenging project required detailed planning and robust Project Management in order to be completed and the Port Authorities applied rigorous techniques from the beginning:

1. Tender: The Port of Rotterdam put out an open tender for a Design, Construct and Maintenance (DCM) contract to build Maasvlakte 2. An open tender process allowed for a large amount of freedom for potential contractors by only indicating general technical requirements while leaving the final design, construction, and planning processes to the companies.

2. Finance: The winning consortium (named PUMA) received a fixed amount of money for a particular stage in the development of MV2 (lump sum scheme).

3. Design: The PUMA consortium conducted several years of studies and the final, optimal design that was decided for Maasvlakte 2 is depicted on Figure 2 below.

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[1] *Port Vision 2020*. (n.d.). Retrieved from Port of Rotterdam: http://www.portofrotterdam.com/
[2] de Gijt, J. G., van Kleef, J. M., Taneja, P., & Ligteringen, H. (2010). Development of container handling in the Port of Rotterdam.

Figure 2: Phase 1 of Maasvlakte 2[3]

4. Budget: Although the financial aspects of the MV2 project are confidential, it has been stated that the costs in general have gone according to schedule[4].

5. Success Criteria and Factors: In order for a project to be deemed successful, criteria need to be defined under which the complete project will be evaluated. The Port of Rotterdam and the PUMA consortium defined the following:

a. Safety: the project is successful if no accidents occur due to causes within the influence of the Port of Rotterdam and the PUMA consortium

b. Within budget: As stated, the costs remained within budget

c. Stakeholder satisfaction: The stakeholders include not only the Port of Rotterdam, but also the Dutch government, local municipalities, environmental operators, current employees of the port etc.

d. Learning project: The project will be deemed successful if all stakeholders and organizations learned from the process

e. Image: The Project will be deemed successful if it has been successfully executed and it has received positive mentions in the media.

[3] Hamer, D. G., & de Boer, G. M. (2010). Maasvlakte 2: An innovative contractual and systems engineering approach. *Terra et Aqua*, *121*(2010), 3-11.
[4] *Maasvlakte 2*. (2013). Retrieved from Maasvlakte 2 : http://www.maasvlakte2.com/en/index/show/id/625/Chronological+overview

Thus, to complete such a challenging project, the project development methodology that was used by the Port of Rotterdam and the PUMA consortium relies on the principles of Systems Engineering[5].

The purpose of the PMBOG project is to bring such an experience to all the people that are interested in Project Management in a consequence free environment. Not only that, but the PMBOG partnership wishes to make the experience fulfilling and fun and for that reason, a board game will be designed and developed that will allow the players to learn how to perform successful project management, always based on sound and rigorous scientific theories.

[5] Leidraad voor Systems Engineering binnen de GWW-sector, 2nd edition, 2008