The Cynefin Framework and the Technical Leadership Model

Davide Fierro
INAF – National Institute for Astrophysics
Scientific Directorate - ROMA
fierro@inaf.it

ABSTRACT

Nowadays the macro-economic crisis, the globalization of markets in a framework of absolute non-uniformity of the reference economic systems, the exponential growth in the complexity of the projects, the continuous development of technologies and, above all, the criticality of requirements management subject to rapid and sometimes uncontrollable evolution, require an holistic, efficient, methodically structured and strongly flexible management approach. To strengthen the leadership in such a drastically competitive scenario requires personnel constantly trained in the reference standards, as well as in the application of processes and procedures, both engineering and managerial, which represent the state of art in the international reference system. The definition, selection and management of the optimized development of techno-management solutions are therefore strategic, vital, for the "feasibility" and competitiveness of front-running projects and cannot succeed without a contextual analysis of the reference scenarios.

The Cynefin Framework, developed between 1999 and 2003 by Snowden and Kurtz on the basis of studies by Boisot and Cilleris, helps leaders to identify the reference context and describes the features and operating logics to apply to it. The Cynefin is an interpretative model of different levels of complexity of the systems in a continuum that ranges from order to disorder through five different contexts (or domains): simple, complicated, complex, chaotic and disorder. The Cynefin therefore allows leaders to have a polyhedral view of the problems inherent in complex systems by describing in a pragmatic manner the dynamics and typical behavior within various domains. Each respective domain is unique in its scope and characterized by specific decision-making models, management, leadership skills, as well as by different ratios of cause / effect.

The goal of the seminar, part of the Technical Leadership session, is to represent and describe the various domains of complexity as indicated by the Cynefin Framework. The seminar will also analyze and "contextualize" the most effective and efficient techno-managerial methodologies, depending on the belonging domain of the projects and the professional "soft and hard" characteristics of the leaders, the latter in relation to the "mind map" drawn up by the "INCOSE Institute for Technical Leadership" working group, to which D. Fierro belongs.

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AUTHOR BIOGRAPHY

Davide Fierro is the Head of INAF 's "Project Engineering". He has direct roles in various international programs such as SKA , of wich he is the Program Manager of the overall INAF's participation. He has been involved in large astrophysics technology projects, with roles of PM/SE, for about 20 years. He collaborates with various Universities and is committed in dissemination activities of SE/PM methodologies. He is member of the Board of INCOSE Italy chapter and of the board of AFCEA Rome. He is also member of the "INCOSE Institute for Technical Leadership Development Program" and associate teacher of ISIPM. In 2009 he was appointed as "Project Controller of National Projects" at INAF's "Scientific Directorate". He got his first relevant job in 1997 as Deputy PM of the VST project followed by the "VST AIV Manager" role, for which he spent about two years at ESO Paranal Observatory, Chile. He graduated in Mechanical Engineering from University of Naples, where he also got the PhD in Industrial/Management Engineering. He then continued his postPhD studies first at LUISS Business School and then at the SDA Bocconi School of Management.