Despite the fact that condition monitoring is well established as a scientific discipline, there is still a great need to implement results of research into the practice, as monitoring and diagnostic system. In this chapter, a good introduction is provided by Jardine describing “role of CBM for industrial equipment…” . It should be emphasized, that application of effective techniques described by scientists in well ranked journals will never be possible when only test rig will be made without reference to real machine operated in industry. The rig investigation is only the first step for success of condition monitoring method. There is still not enough experiences applied on machines. The investigation done on machines gives us what should be investigated using test rig. The test rigs investigations many times not meets industry needs. Scientists should give more attention to the industrial problems. Several good examples of problem complexity is provided in this chapter in the context of marine gas turbine, mining industry, wind turbine generator or even wind turbines farms. In such practical implementation, as multi-channel online systems, even signal quality assessment seems to be serious data-mining task.