SMART INFORMATION AND KNOWLEDGE MANAGEMENT IN COMPLEX SYSTEMS: SOME ISSUES AND CHALLENGES

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The advance and application of smart techniques and technologies for information and knowledge engineering adds significantly to the emerging area of intelligent systems development. Such systems show potential of becoming the primary determinants of future success and survival in the complexities of our society of the 21st century. The ability to transform information into knowledge, and then to use it in the decision making processes, contributes in a substantial way to "intelligent industrial applications", understood as the capacity of a system/technology to act appropriately in uncertain environments. Intelligent systems research, development, and industrial application shows potential of becoming the primary area of interest among both academics and practitioners in our knowledge based society. This fact creates enormous challenges for engineering and management in the new millennium. The presentation signals some of these challenges and issues.