A PROGRAM FOR USING THE AUTOMATED MODEL OF THE SYSTEM PROJECT IN THE CONTROL OF TECHNOLOGICAL PROCESSES

Amanbaev Nursultan Salamat o'g'li
Student of Nukus Mining Institute:
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Abstract: Mass customization in process management, so attracting and retaining clients as a way to meet individual requirements, is a major challenge in the design industry. The rise of design automation is opening up new opportunities to develop customized products at high speed and at costs equivalent to mass production. Design automation is based on devices based on the processes of product reuse and knowledge recycling. Automation have proven to be practical, highly aggregated knowledge, and we have observed a governance model in process automation in engineering design. Product and process knowledge at other stages of the life cycle are expressed and generated in multiple approaches, and there is no process for adapting product variants along with the product design process, resulting in breakpoints or additional iterations that slow down the design automation process. Therefore, it is desirable to provide tailored knowledge for design automation, and this method is still under development. Accordingly, this contribution suggests a new approach to knowledge representation and the need to enable design automation for mass customization. Methodologically, this new approach uses semantics and design problem, enriches the system environment to automatically obtain design information, and the rationale and design process are represented by a formal automations.

Keywords: Automation knowledge,automations, technological process representation, design automation, automatic control system, automatic system program. .

Introduction

In process management, the engineering design industry is concerned with the need for constant involvement and needs to consider the need to retain customers, maintain and increase market share and profitability, and meet the needs of diverse communities. A process that results in individual products that are best incorporated into the design to meet customer requirements. Seize this opportunity and mass privatization, increasing market share and increasing industrial profitability has become the main trend. The technology design process and the production of customized products to meet user needs, but at the same speed and cost as used for mass production. Technological processes rely on very fast reactions to customer needs, which by reusing relevant product and process knowledge make simple tasks faster than a human designer, rather than automated aids. Typically, knowledge-based engineering applications focus on automating a design task that changes design features to fulfill at least one design framework for reusing product knowledge. This reduces the engineering time spent on a single task based on automated systems based on technological processes, but it does not mean that it leads to independent solutions for specific tasks. Design parameters and their changes can be observed during the design process, and the constraints and sequence of design tasks should be considered as knowledge. It allows technological

management of design processes instead of independent tasks. This requires integration and process knowledge, because within a product-oriented approach, the design process in a given country is characterized by geometric configuration and potential facts. This configuration can be enriched with a design rationale that describes why it was chosen. However, the adaptation process itself is not explained in a logical way based on technological knowledge in engineering design. Hypothetically, a particular process design task could change which features are needed, allowing for a seamless automatic mode. It provides knowledge of this information in the context of a specific technological process and the main design process and, if processed, allows the system network to move from single design tasks to entire design processes. However, compared to processes in other design-based technological processes in automated systems, technological system processes are relatively simple. Accordingly, this contribution proposes to provide new models and knowledge. In order to divide the design process into several stages for mass customization, it is necessary to provide the design process to ensure the automation of the design process. Knowledge representation must meet the following requirements: First, the knowledge representation must be processed by humans and computers. Second, the presentation of knowledge should emphasize compatibility with existing knowledge competencies in engineering design, and third, the presentation of knowledge should be subject to minimum obligations. Fourth, the implementation of knowledge on the processing of modern products with many design parameters should be automated. Fifth, it should be implemented in a typical design environment to reduce user intervention. Design automation creates initial hurdles for process control engineers. The technical parameters of the technological system based on the design values are a branch of artificial intelligence that deals with systems and questions, how to represent knowledge in a machine, draw conclusions from it, obtain additional knowledge or find a solution to a given problem. we can solve the problem. After the definition provided by the process engineers and others, we can manage the processes through the system. Ontology is a specification of concrete conceptualization, that is, an ontology is a set of well-defined concepts, relationships, and other objects that clearly represent a domain, and is a knowledge management information system. In the context of knowledge-based applications, ontologies aim to eliminate misinterpretation, and thus human-machine communication can be developed to improve and optimize communication between humans and machines. Design automation is an evolutionary step in computing achieved through knowledge-based engineering, representing the combination of object-oriented programming, artificial intelligence, and computer-aided design technologies. In general, project automation in engineering design requires an in-depth study of the design process, provides an opportunity to capture and formalize principles in the field of design. Mass customization is the process of designing and manufacturing customized products to meet user needs, but at the same speed and cost as used in mass production. Adaptation in the mechanical field is a series of design adaptations such as resizing, shaping and positioning of geometric elements, as well as material or manufacturing changes in technical specifications. Design fundamentals are essential knowledge for the next generation, product development systems. Generally, it refers to explaining why and how the artifact was created. Without paying close attention to the fundamentals of design, time and effort must be significantly increased to search for relevant answers. Developing and managing software can take time consumption and resource requirements. Software development usually combines the use of Version

Management systems for application storage management current and previous versions in the repository. Repository development is limited by resources available to the application development team. Automation the allocation of these limited resources can be crucial factor whether or not there is a warehouse lucky It is predicted by identifying the elements due to frequent changes in warehouse. It helps to build on previous research predicting changes that will help improve the resource allocation for both repository developers and Version management system managers. The software is widely distributed and integrated with many platforms and applications mobile devices, websites, embedded systems, critical safety systems. Software development and management the program can be time and resource intensive. Systems that require the software we are developing today is becoming more complicated in terms of numbers functional and non-functional requirements for them to support In many real-life applications, the effect of poor quality can also have disastrous effects the purpose of these systems.

Conclusions

To define the conditions that the knowledge representation must satisfy enable design automation for mass customization, this contribution presented a model. For the public customization process, concepts, and automation system programs state intentional knowledge about the model, annotation scheme, and process used to integrate knowledge presentation into the work environment of the product and ensures a quality process for developers. Finally, a mapping scheme is given for the implementation of confirmatory knowledge and manages individual mass privatization processes. Can be found in a more complex description of design intent. This achieved through two-dimensional, hierarchical modeling of the mass privatization process and represented by chronological arrows. The first represents the relationship between design intent, as the basis of design, can manage technological processes from requirements to design parameters. The second represents provides a temporal sequence of adaptations using states and transitions

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