

Engaging People Living with Dementia in The Design Process

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Abstract:

This study explores how the integration of inclusive design, participatory design (PD), collaborative design, and generative design has led to new methods and tools for involving the elderly in the design process. particularly the elderly with dementia. Dementia is one of the many health issues that become more common among the elderly (though the exact risk factors vary depending on factors like diet, exercise, and genetics). There are approximately 55 million dementia patients globally, with the majority (58%) residing in low- and middle-income nations. Annually, 7.7 million new cases of dementia are diagnosed, and the number of people with dementia is projected to increase to 75.6 million by 2030 and nearly triple to 135.5 million by 2050. In Egypt, there are approximately 600,000 dementia patients, 60% of whom have Alzheimer's, and it is anticipated that by 2030, there will be 1,200,000 dementia patients. Till this day, People living with dementia are still subjected to significant stigmatization. As a result of their exclusion from research and design processes, the majority of newer technologies, products, and services either disregard the needs of older people with dementia or lean more towards the preferences of carers, resulting in designs that are inappropriate or inaccessible to the target population. However, we are currently confronted with significant environmental, social, and cultural obstacles. To be effective, design innovations must be accessible to all stakeholders. We can only use design to solve today's problems by thinking collectively and acting inclusively. By establishing inclusive design as the backbone of the design process and integrating participatory design (PD) techniques, as well as collaborative co-design and generative design research, we are able to better meet the needs of those who will be directly impacted by the final product. People from a wide range of fields need to be brought into the design process. 'All people are creative and can participate in co-design if they are provided with relevant tools and the appropriate settings for their use.' Liz Sanders Dementia seniors' inclusion and participation in research and development must therefore be carefully considered. (Specifically for the first three stages of the disease or communicative patients. Therefore, the following research problem arose:• Research Questions: 1-Is it possible for older people who are living with dementia to engage in the design process? 2-How can the role and insights of an industrial designer be utilised to include and involve older people with dementia in research and development, especially in the first three stages of the disease or for patients who are still able to communicate?. Research Significance: The significance of the study lies in the need to allow dementia patients to participate in various stages of the industrial design process while refocusing design efforts on meeting their needs and requirements rather than those expressed on their behalf by others. This prompted industrial designers to create more effective solutions for this elderly population by employing inclusive and co-design strategies. Permitting people with dementia to participate fully in the design process. Research Objectives: The aim of this research is shed light on the application of generative design tools in the context of industrial design processes involving people with dementia. Research Methodology: The research follows the descriptive method by using the investigative method, then the analytical method by gathering and sorting information, and then the deductive method. Research Results & Recommendations:1-It is recommended to use a mix of participatory design (PD) methods, co-design approaches, and generative design techniques to tackle complex design problems that might come up when collaborating with older people who have dementia. 2- The industrial designer must first think about the goal of the ongoing design process and then choose the tools that will facilitate people's thinking and talking about their experiences. 3- Industrial Designers must consider research ethics, safety, and tailoring toolkits to the specific requirements of the design process, as well as selecting materials to cater to participants' (PWD) preferences and providing explanations of how to use the TOOLS.

Keywords:

Generative Toolkit Design, Co-Design, Participatory Design (PD), User Centred Design, , User Generated Design

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