Leadership: Jerry Overton, CEO and Co-Founder, appliedAIstudio

Paper Title: AI-Powered Smart Homes: Revolutionizing Caregiving for Aging and Disabilities – Insights from an Industry Working Group

Target Audience:

- Intelligent Buildings
- Connected Homes
- Engineers
- Real Estate Developers

You can find a presentation version of this proposal here:
https://issuu.com/appliedaistudio/docs/appliedaistudio_proposal_for_ashb_industry_paper?fr=sMWFiNjYzNTI0ODE

Abstract: The demographic shift towards an aging population and the increasing number of individuals with disabilities have highlighted the critical need for innovative solutions ensuring the safety and support of elderly individuals and those with disabilities within their own homes. Despite advancements in smart home technology, significant gaps persist in accessibility, usability, and affordability, hindering the adoption of solutions tailored to these demographics. This paper outlines a collaborative effort to address these market gaps and foster the development of transformative AI-powered smart home solutions that cater to the unique needs of elderly and disabled individuals.

Introduction: The introduction provides context on the pressing need for innovative smart home solutions catering to aging and disabled populations. It highlights the gaps in current offerings and emphasizes the role of the working group in addressing these challenges through collaborative research and innovation.

Identification of Market Gaps: This section delves into the specific market gaps identified in current smart home solutions for aging and disabilities. It explores issues related to accessibility, usability, affordability, and integration, providing a comprehensive overview of the challenges faced by vulnerable populations.

Alternative Solutions Survey: This section delves into a comprehensive survey of existing solutions and alternative approaches offered by industry leaders. It analyzes their efficacy in addressing the identified market gaps and explores emerging trends and opportunities in the smart home sector.

Opportunities and Challenges: The opportunities and challenges associated with developing and implementing tailored smart home solutions for aging and disabilities are explored in this section. It examines potential avenues for innovation and discusses barriers to adoption, providing insights for overcoming challenges.

Proposed Roadmap for Smart Home Innovation: This section presents a visionary roadmap for advancing smart home technology to better serve the needs of aging and disabled populations. It outlines a framework for collaborative innovation and development, guiding stakeholders towards the creation of inclusive and empowering smart home environments.

Guiding Framework for Stakeholder Collaboration: The recommendations section offers a comprehensive framework for stakeholders to collaborate effectively in addressing market gaps and driving positive change in the smart home industry. It provides actionable recommendations and strategic insights to inspire collective action and innovation.

Empowering the Future of Smart Homes: A Call to Action

The conclusion summarizes key findings and insights from the paper, highlighting the implications for the smart home industry and potential next steps for stakeholders. It underscores the importance of collective action in addressing market gaps and emphasizes the transformative potential of AI-powered smart home solutions for aging and disabilities.

Roles of Each Working Group Member: All Members: Actively participate in discussions, provide feedback, and collaborate on exploring ways to fill the identified market gaps, as detailed in the abstract.

Working Plan:

Weeks 1-2: Formation of the working group, introduction meeting, and assignment of roles. Begin research phase, focusing on addressing specific market gaps outlined in the abstract.

Weeks 3-4: Identification and analysis of specific market gaps based on the findings from the market and competitive intelligence analysis, consistent with the objectives outlined in the abstract.

Weeks 5-6: Assessment of competitive landscape and existing solutions. Drafting of proposed solutions and recommendations, aligning efforts with the abstract's objectives.

Weeks 7-8: Continued drafting and refinement of proposed solutions. Incorporate feedback from stakeholders, ensuring alignment with the research objectives outlined in the abstract.

Weeks 9-10: Finalize paper, review and revisions, formatting, and preparation for publication. Presentation preparation, focusing on communicating key insights and recommendations derived from the research.

Week 11: Presentation of findings to ASHB