IEEE SA
STANDARDS ASSOCIATION

AGING AND LONGEVITY: IEEE AGETECH ACTIVITY

WEBINAR FOR IEEE LIFE MEMBERS

23 January 2025

IEEE

Standards for Technology for the Aging (AgeTech) Industry Connections Program

- IEEE Life Members conference (April 2024) identified standards for technology for aging populations (age-tech) as an area of interest
- Potential technical areas might include computers/software, consumer electronics, medicine, assistive robotics, etc.
- Standards could address usability/human factors, design guidelines, terminology, metrics/test methods

Volunteers who are interested in participating in this activity express your interest at **https://ieeesa.io/AgeTech**

IEEE SA STANDARDS ASSOCIATION

HEALTHCARE & LIFE SCIENCES

IEEE

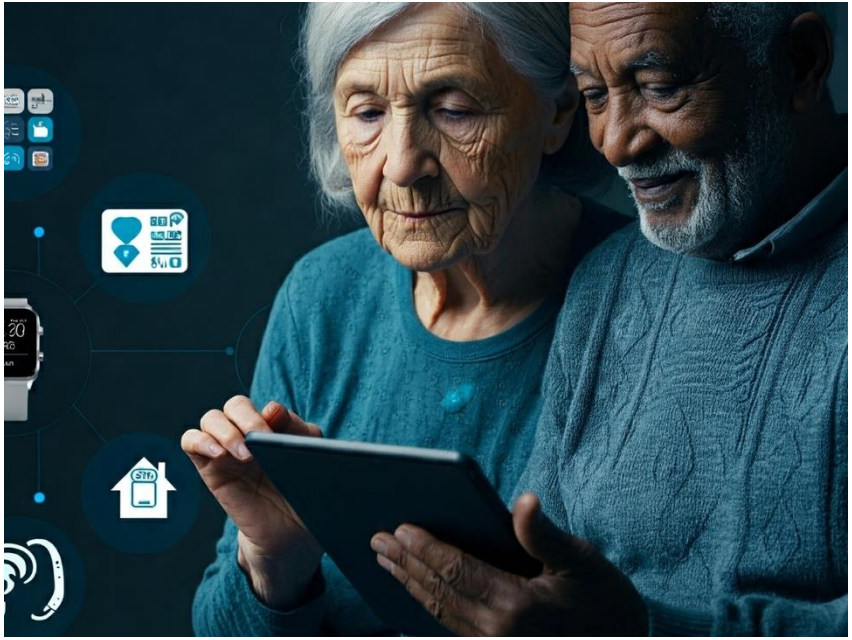
WEBINAR HOUSEKEEPING ITEMS

- This will session will be recorded in its entirety.
- This session is one-way broadcast. The audience is automatically muted.
- Questions for the panelists may be submitted through the Q&A button
  - Questions will be answered at the end of the presentations

IEEE SA INDUSTRY CONNECTIONS ACTIVITY: TECHNOLOGY STANDARDS FOR THE AGING

Motivation

- Older adults (>65 years) represent a large and growing proportion of society: 13% in 2019 -> 21% in 2050.
- AgeTech = technology designed to improve the quality of life, independence, and well-being of older adults.
- Examples: health monitoring and cognitive support, smart home technologies, mobility tools, social connectivity, and more.
- There are challenges to realizing benefits: gaps in standards, data, and education



TECHNOLOGY STANDARDS FOR THE AGING: WEBINAR PURPOSE

Learn about AgeTech

Goals of IEEE AgeTech activity: standards, data, education

Why you should become involved and how

PRESENTERS

George Arnold
IEEE Life Fellow and Chair, IEEE SA AgeTech Industry Connections Activity

Kirpal Khalsa
IEEE Life Member and Secretary, IEEE SA AgeTech Industry Connections Activity

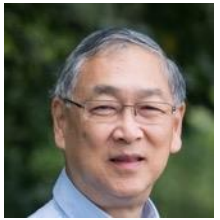
Richard Caro
Co-founder, Tech-enhanced Life PBC

Maxine Cohen
IEEE Life Member and IEEE Life Member Conference Organizing Committee

Mike Andrews
Managing Partner, Andrews & Associates, and Vice-Chair, IEEE SA AgeTech Industry Connections Activity

Maria Palombini
IEEE SA Healthcare and Life Sciences (HLS) Practice Lead

John McDonald, P.E.
JDM Associates, LLC,
IEEE Life Fellow



Eugene Chang
IEEE Life Senior Member, IEEE Entrepreneurship Coach

AGENDA

Introduction – Maria Palombini and George Arnold (5 min)

What is AgeTech? Working Definitions – Kirpal Khalsa (10 min)

What is the Challenge? Examples – Richard Caro (10 min)

IEEE AgeTech Beginnings – Maxine Cohen/Mike Andrews (5 min)

How Can IEEE Help? Overview of Standards Process, Industry Connections and Society Engagement – Maria Palombini/John McDonald (15 min)

Activity Goals, Structure and Workplan – George Arnold (5 min)

Why You Should Become Involved and How – Eugene Chang (15 min)

Q&A and Discussion (15 min)

Next Steps – George Arnold (10 min)

WHAT IS AGETECH? WORKING DEFINITIONS - KIRPAL KHALSA

SIMPLE DEFINITION?

AgeTech is about technology solutions for enhancing the lives of older adults.

AgeTech technology solutions include devices (embedded and wearable), applications, solutions and systems that address challenges associated with the quality of life of aging and elderly populations.

The users of the technologies include older adults, caregivers, and healthcare providers.

AgeTech is focused on the technical solutions supporting older adults and is a subset of the broader fields of Aging and Longevity that encompass AgeTech as a data source and solution.

AgeTech can be critical in addressing the needs of an aging population, enabling older adults to live longer, healthier, and more connected lives while reducing the burden on caregivers and healthcare systems.

AGETECH, AGING AND LONGEVITY

AgeTech is about technology solutions for enhancing the lives of older adults.

Aging, as a broad area of focus, is about understanding the natural biological process and its impact on society. AgeTech devices provide critical information that, when combined with AgeTech analytical solutions, can lead to enhanced understanding of the natural process.

Longevity, as a broad area of focus, is about understanding how to extend lifespan and health. AgeTech solutions can be components of longevity solutions.

AGETECH

Areas encompassed

1. **Healthcare and Wellness:**
    - **Telemedicine, Wearables and Monitoring Devices, AI for Diagnosis and Care Management**
2. **Smart Homes and Assistive Technologies:**
    - **Home Automation, Assistive Devices, Robotic Companions**
3. **Social Engagement and Mental Health:**
    - **Social Platforms for Seniors, Virtual Reality (VR) Therapy, Online Learning and Entertainment**
4. **Financial Services:**
    - **FinTech for Seniors, Fraud Prevention**
5. **Caregiver Support:**
    - **Remote Care Platforms, Care Coordination Tools**
6. **Mobility Solutions:**
    - **Autonomous Vehicles, Accessible Ride-Sharing Services**

NOTABLE AREAS (MORE DETAIL)

Healthcare and Wellness:

- **Telemedicine**: remote access to healthcare professionals, lower cost and fewer in person visits
- **Wearables and Monitoring Devices**: Smartwatches, heart rate monitors, health rings, and devices like fall detectors help track health metrics and alert caregivers or emergency services in case of an issue.
- **AI for Diagnosis and Care Management**: AI tools (and associated devices) assist in early detection and monitoring of diseases like Alzheimer's, dementia, and chronic conditions, as well as managing medication and treatment plans.

Smart Homes and Assistive Technologies:

- **Home Automation**: Smart lighting, thermostats, voice-activated assistants, integrated emergency systems and other IoT devices can help older adults maintain independence at home.
- **Assistive Devices**: Tools like stairlifts, smart walkers, and hearing aids enhance mobility and accessibility.
- **Robotic Companions**: Social Robots like Paro (therapeutic robots) or AI-driven assistants can provide companionship and help with tasks.

NOTABLE AREAS (MORE DETAIL – CONT.)

Social Engagement and Mental Health:

- **Social Platforms for Seniors**: Technologies that enable older adults to stay connected with family and friends and engage in online communities or interest-based groups.
- **Virtual Reality (VR) Therapy**: Used for mental health treatments, memory stimulation, and immersive experiences that can reduce isolation and anxiety.
- **Online Learning and Entertainment**: Digital platforms that offer cognitive stimulation and brain health support, entertainment, and lifelong learning opportunities to keep seniors engaged.

Financial Services:

- **FinTech for Seniors**: Tools that simplify banking, investment, and retirement planning tailored to older adults, often incorporating features for managing finances with ease and security.
- **Fraud Prevention**: Technologies designed to protect seniors from financial scams and identity theft.

NOTABLE AREAS (MORE DETAIL – CONT.)

Caregiver Support:

- **Remote Care Platforms**: Apps and systems that allow family members and caregivers to monitor and assist older adults remotely.
- **Care Coordination Tools**: Software solutions that help manage care plans, medications, and communication between healthcare providers, families, and caregivers.

Mobility Solutions:

- **Autonomous Vehicles**: Designed to help seniors maintain independence by providing transportation without the need to drive.
- **Accessible Ride-Sharing Services**: Ride-hailing platforms that cater to seniors with mobility issues, offering vehicles with ramps and other accessibility features.

WHAT DRIVES THE NEED?

- **Aging Population:**
  - The number of older adults (aged 65 and above) is rapidly increasing globally, particularly in developed countries.
- **Desire for Independence:**
  - Many older adults prefer aging in place, living in their homes rather than in institutional care.
- **Caregiver Shortages:**
  - As the population ages, there is a growing strain on healthcare systems and caregiving resources, increasing the need for technological solutions.
- **Rising Healthcare Costs:**
  - AgeTech can help reduce healthcare costs by enabling preventative care, early intervention, and remote monitoring.

SOME CHALLENGES

- **Newness of rapidly developing area:**
  - large ecosystems (and many startups) that don't collaborate/interoperate regarding communications and data compatibility
  - lack of standards to support a common ecosystem and lack of common measures of effectiveness and quality
- **Digital Literacy:**
  - Older adults often face difficulties in adopting new technologies, sometimes due to a lack of familiarity or training. Paradigm shifts can be particularly challenging.
- **Affordability:**
  - Some AgeTech solutions can be expensive, making them less accessible to low-income seniors.
- **Privacy and Security:**
  - Many AgeTech devices collect sensitive data, raising concerns about data privacy and the potential for cyberattacks or misuse of personal information.

TERMINOLOGY SOUP - WIP

- **A few synonyms for AgeTech (subtle flavors)**
  - **ElderTech**
  - **SilverTech**
  - **Longevity Technology**
  - **Assistive Technology for Aging**
  - **Aging-in-Place Technology**
  - **Senior Technology Solutions**
  - **Smart Aging Technology**
  - **CareTech for Elders**
  - **HealthTech for Seniors**
  - **Gerontechnology**

WHAT IS THE CHALLENGE? EXAMPLES OF EMERGING SOLUTIONS THAT CAN BE INFLUENCED BY AGETECH DESIGN - RICHARD CARO

LEARNINGS FROM A DECADE OF LONGEVITY EXPLORING

Tech-enhanced Life, Longevity Explorers

- **Older Adults Surface MANY "big problems in need of solutions"**
- **Easy to "imagine" tech-based solutions**
- **BUT, product after product fails to be adopted.**

WHY?

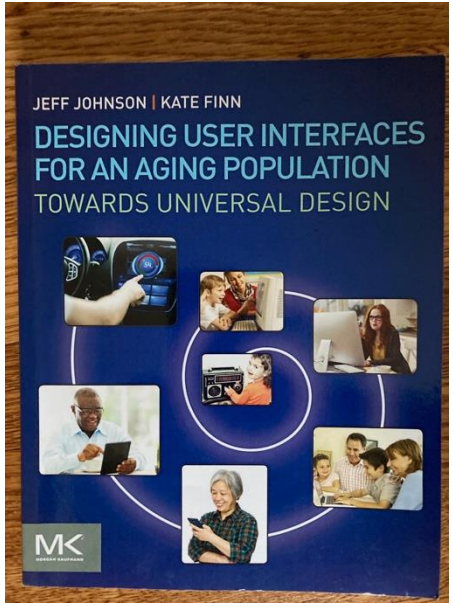
Depends on specific example, but often:

- Too hard to use
- Targets wrong "problem"
- No-one knows about it / challenge to reach audience.
- Aged care ecosystem has different goals than the older adults

COULD Standards help?

- Maybe. In some areas. Lets see if we can make a contribution.

1. HUMAN COMPUTER INTERFACE ISSUES



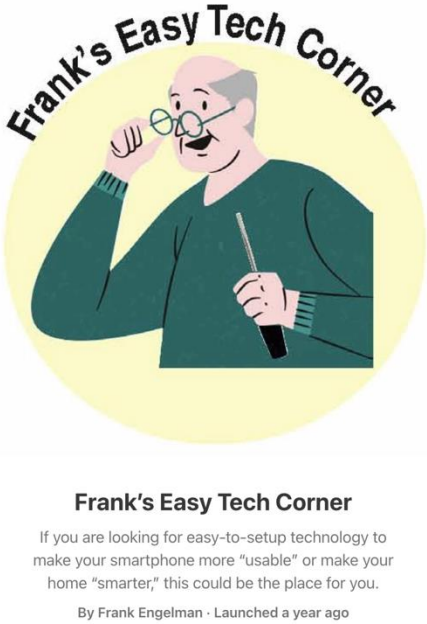
There is a whole book on the challenges older adults have with interfaces.

- Many products don't incorporate the teachings of this book!

For example:

- Complex vision issues (eg font size and contrast);
- Motor Control (eg swiping)
- Hearing & Speech (eg voice inputs and outputs)
- Cognition (eg adapting to interface changes / updates)
- And much more.

2. UNTAPPED POTENTIAL: SMART HOMES



A Lost Decade

In 2014, early offerings seemed so promising. BUT, they did not take off.

Lots of DIY projects look extremely promising

- See Frank Engelman's work, for example.

Barriers

- Point Solutions not "Entire Problem Solutions"
- Typically need a DIY person to support them

Standards

- Some Standards are emerging. Do we need more / better standards?

3. EMERGING POTENTIAL: ROBOTS & AI

Brainstorming by Older Adults suggests many many solutions that AI might help with in the near future.

- There are some tech obstacles
- There are BIG obstacles thinking through the use cases, due to lack of inputs from target customers
- Adoption, and interaction models seem likely to be tricky.

Can Standards Help?

- If so, what types of standards and how will they help?

4. PRIVACY, PASSWORDS, TFA: PEOPLE JUST GIVE UP

Start:
User decides to log in to a website.

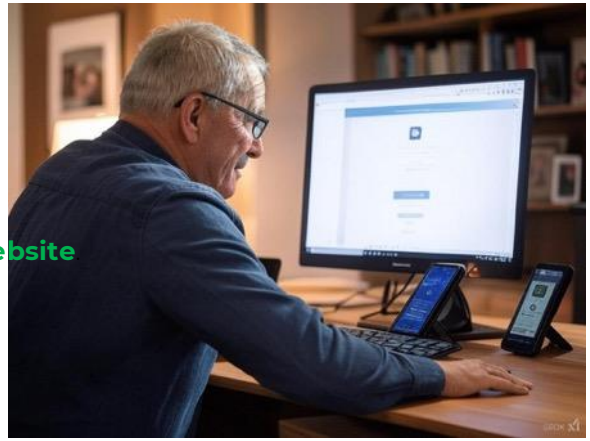
Step 1: Enter Credentials
User types in the website URL.
User enters username or email.

Step 2: Password Manager
User clicks on the password field.
Password manager (e.g., LastPass, 1Password) auto-fills or prompts for the p
If Password Manager is set up:
Password is automatically entered.
If not:
User manually enters the password.

Step 3: First Authentication
User submits login credentials.
Website processes login attempt.

Decision Point: Is Password Correct?
Yes: Proceed to Two-Factor Authentication.
No: User prompted to re-enter credentials or reset password.

Step 4: Two-Factor Authentication (2FA)
Option 1: SMS/Phone Authentication
Website sends a code via SMS to the user's phone.
User checks phone, enters code on the website.
Option 2: App-Based Authentication
Notification or code generated in an authentication app (e.g., Google Authenticator, Authy).
User opens the app, views the code, and enters it on the website.



Step 5: Final Authentication
Website verifies the 2FA code.
If Valid: User is logged in.
If Invalid: User is prompted to retry or use an alternative method.

End:
User is now logged into the website

IEEE AGETECH BEGINNINGS - MAXINE COHEN/MIKE ANDREWS

IEEE AGETECH BEGINNINGS

AT THE FIRST LIFE MEMBERS CONFERENCE….

The closing session for the 2024 Life Members Conference was a panel titled:

The Next Chapter: Life Members have a wealth of knowledge and experience gained through their careers. How can you pass it on to influence technology for the benefit of humanity?

Panel Moderator: Michael Andrews,

Panel Members: *Dr. Karen Panetta, Dr. Brittne Kakula, Fred Schindler, Matt Rao* (*student*)

PANEL DISCUSSION

During the moderated discussion, one of the questions posed to the panel was about the products designed for senior citizens. The panel explored multiple products and how many of those products were not useful for an aging population because of

1. Design
2. Configuration
3. Functionality
4. The variety of products available
5. No apparent standards relating to the value or usability of the product for an aging population

PANEL DISCUSSION OUTCOMES

- Based on the comments made by the panel and the feedback from the audience, it was decided that IEEE – Life Members needed to lead some action.
- A chair volunteered and an ad hoc committee was quickly formed to research the AgeTech marketplace and determine any IEEE entities, public or private groups that might be doing any work in the AgeTech standards arena.
- The ad hoc committee confirmed that there were no IEEE AgeTech related activities and began identifying potential partners in the AgeTech market

ADHOC COMMITTEE ACTION

- The ad hoc committee identified an “AgeTech gap” and decided to take action
- A small committee was formed that would have the responsibility of addressing the needs for age related standards for
  1. Products
  2. Systems
  3. Services
  4. Datasets
  5. Smart City design
- The committee approached the Standards Association and were encouraged to move forward with the concept

HOW CAN IEEE HELP?
OVERVIEW OF IEEE STANDARDS PROCESS AND INDUSTRY CONNECTIONS TO FAST-TRACK SOLUTIONS
- MARIA PALOMBINI & JOHN MCDONALD

IEEE SA
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HEALTHCARE & LIFE SCIENCES

ENABLING DIGITAL INNOVATION AND SOLVING GLOBAL MARKET CHALLENGES THROUGH STANDARDIZATION

MARIA PALOMBINI
Director, Healthcare and Life Sciences Global Practice Lead
IEEE Standards Association

IEEE

IEEE SA

IEEE SA BY THE NUMBERS

IEEE

35,000+

Global Contributors

9,100+

Entity & Individual Members

2,250+

Published Standards & Projects

800+

Open Source Communities

160 countries

Diverse, Individual & Entity Participation Worldwide

80+ participants from 49 countries

Government Engagement Program on Standards (GEPS)

60+

Open, Industry Connections Programs

17

Global Registries Administered

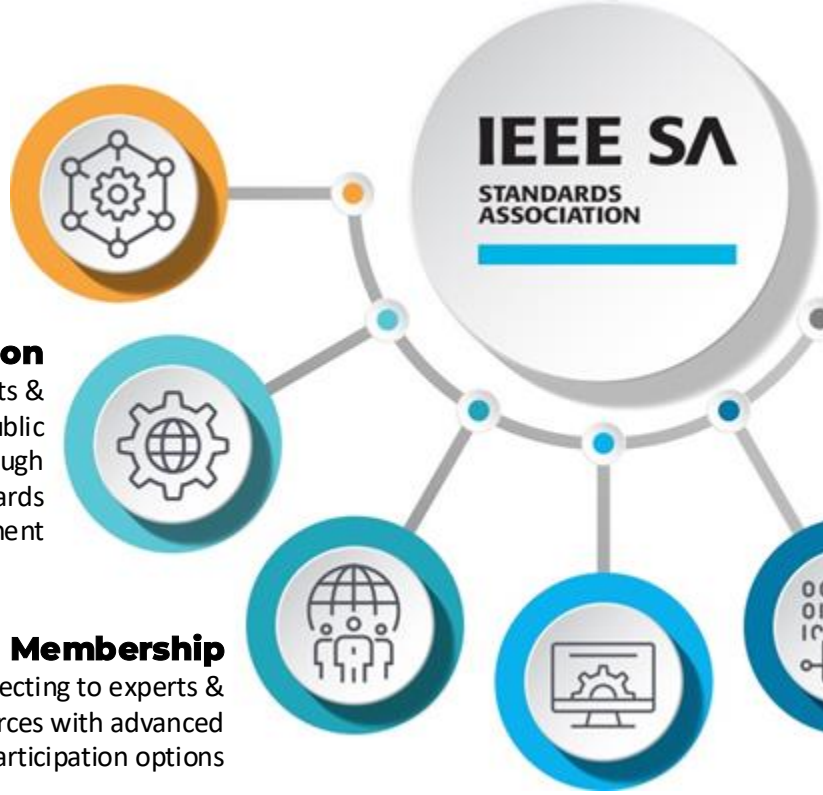
LEARN MORE

standards.ieee.org

As of 10/2024

RAISING THE WORLD'S STANDARDS

PORTFOLIO OF PROGRAMS & SERVICES



Industry Connections
Exploring & incubating new tech & its use

Standardization
Creating markets & protecting public safety through standards development

Membership
Connecting to experts & resources with advanced participation options

Conformity Assessment
Providing confidence & assurance & accelerating market adoption

Registries
Providing unique identifiers to support global compatibility & interoperability

Alliance Management
Providing support to alliances & trade associations

Open Source
Providing a community-powered platform to support open source projects

CENTERS OF COMPETENCE

CONNECTIVITY & TELECOMMUNICATIONS
- Rural Connectivity
- Next Generation Telecom
- Wired and Hybrid Communications

ENERGY
- Smart Energy
- Energy Efficiency
- Energy Infrastructure

FOUNDATIONAL TECHNOLOGIES
- Industrial IoT
- Consumer Applications
- Infrastructure for Emerging Technologies

HEALTHCARE & LIFE SCIENCES
- Biotech/Pharmaceutical
- Clinical Health
- Global Wellness

MOBILITY
- Safe Autonomous Driving
- Zero Emissions
- Mobility as a Service (MaaS)

To improve the global standard quality of life at every step through affordable healthcare and access to medicines; support innovation to improve overall wellness and improve societal outcomes; and to enable innovation through open and standardized means.

Three Major Branches of Focus

1. Pharma/Biotech
2. Clinical Health
3. Global Wellness

https://ieeesa.io/hls

IEEE SA STANDARDS ASSOCIATION

HEALTHCARE & LIFE SCIENCES

IEEE

WORKING WITH IEEE SOCIETIES AND COUNCILS

- IEEE Societies and Councils include “Standards Committees”. The standards committee are “sponsors” of the IEEE SA standard
- IEEE Societies and Councils “oversee” or ”support” industry connections (IC) programs
- Collaboration with IEEE Societies on special projects initiatives (i.e. the Brain Community)
- For Health and Life Science related standards society committees include but not limited to
  - Engineering Medicine & Biology Society (EMBS)
  - Sensors Council
  - Computer Society
  - The Society on Social Implications of Technology (SSIT)

HOW CAN IEEE HELP?

IEEE Standards Association (IEEE SA) is a leading consensus building organization within the IEEE

- Facilitates standards development and standards-related activities
- More than 175 countries are represented
- Suite of programs covers entire standards development ecosystem:
  - Standards Development
  - Conformity Assessment and Certification
  - Registration Authority
  - Industry Connections
  - Alliance Management Services
  - Industry Affiliate Network
  - Open Source
  - Membership
  - Training and Development
  - Government Engagement

IEEE STANDARDS PROCESS: OVERVIEW (1 OF 3)

Standards Development Life Cycle:

- **Stage 1: Initiating the Project**
- Types of IEEE standards projects
- Identify a standards committee
- Project Authorization Request (PAR)
  - Submitted and approved
  - 4 years for completion (can request PAR extension)
- **Stage 2: Mobilizing the Working Group**
- Balance of interests
- Active participants
- Individuals and representatives from entities for entity-based standards projects
- **Stage 3: Drafting the Standard**
- IEEE SA provides editorial draft development support to WGs
- IEEE SA professional staff includes two types of Program Managers
  - Staff liaisons – experts in standards process
  - Staff project editors – experts in editorial matters

IEEE STANDARDS PROCESS: OVERVIEW (2 OF 3)

Standards Development Life Cycle:

- **Stage 4: Balloting the Standard**
- Request authorization from the Standards Committee to begin the process
- Forming a balloting group
  - Individual balloting groups should have at least 10 members
  - Entity balloting groups should have at least 5 entities
  - No interest category (e.g., producers, users) can comprise over one-third of the balloting group
- Balloting a standard
- Comment resolution (Comment Resolution Group)
- Public review (60 days)
- **Stage 5: Gaining the Final Approval**
- IEEE SA Standards Board (SASB) on recommendation of its Standards Review Committee (RevCom)
- After approval, the standard has a thorough, detailed edit from professional IEEE Standards editor
- Standards are sold both as individual documents and within multiple subscriptions (i.e., IEL, IEEE Standards Online Subscriptions)

IEEE STANDARDS PROCESS: OVERVIEW (3 OF 3)

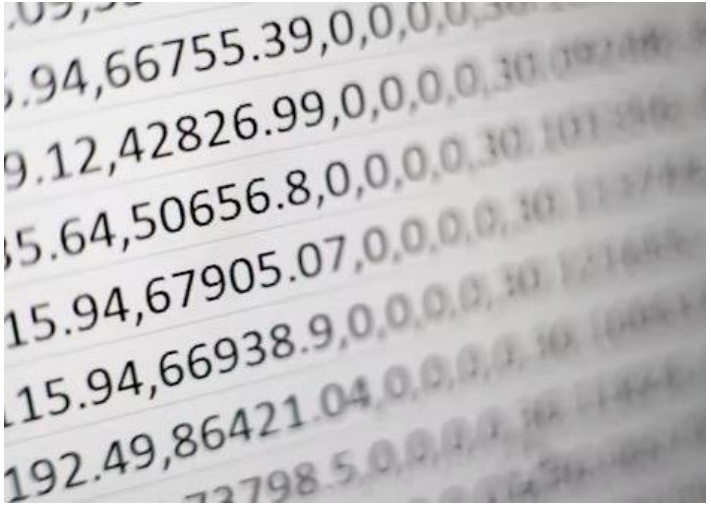
Standards Development Life Cycle:

- **Stage 6: Maintaining the Standard**
- Revising a standard
  - An IEEE standard is active for ten years from the IEEE SA Standards Board approval year
  - Within the ten-year period, Standards Committees can take the following actions
    - Revise the standard by opening the entire document for updates, changes or additions
    - Submit Amendments for additional material to the standard
    - Submit Corrigenda for corrections to the standard that does not introduce new material
    - Withdraw the standard from active to inactive-withdrawn status through an SA ballot
  - If a standard has not been revised before the end of the ten-year maintenance cycle, it may be administratively withdrawn by the IEEE SASB
- Addressing errors
  - IEEE SA can publish an errata if an error during publication is introduced
  - IEEE SA no longer has a reaffirmation/stabilization process

IEEE STANDARDS ASSOCIATION DATASETS

IEEE DataPort Platform

- **The IEEE DataPort platform allows researchers to access and share a wide variety of datasets across diverse technical fields, all managed by the IEEE.**
- Access: You can access datasets on IEEE DataPort by creating an IEEE account and subscribing to the platform.
- Dataset Types: The platform hosts datasets covering various areas like artificial intelligence, machine learning, signal processing, image processing, power systems, biomedical sciences, and more.
- Open Access: Some datasets are available as “Open Access,” meaning they can be accessed by anyone without a subscription.
- Data Upload: Researchers can upload their own datasets to the platform, with a limit on file size.
- DOI Assignment: Each dataset on IEEE DataPort is assigned a Digital Object Identifier (DOI) for proper citation.



INDUSTRY CONNECTIONS (IC) PROGRAM

To Fast Track Solutions

- **The Industry Connections (IC) program helps incubate new standards and related products and services by facilitating collaboration among organization and individuals as they hone and refine their thinking on rapidly changing technologies.**
- Building consensus and producing shared results
- Provides a range of resources to **fast-track** content and deliverables, including:
  - Proposals for standards
  - White papers
  - Peer-reviewed guides and position papers
  - Workshops and events
  - Databases and registration services

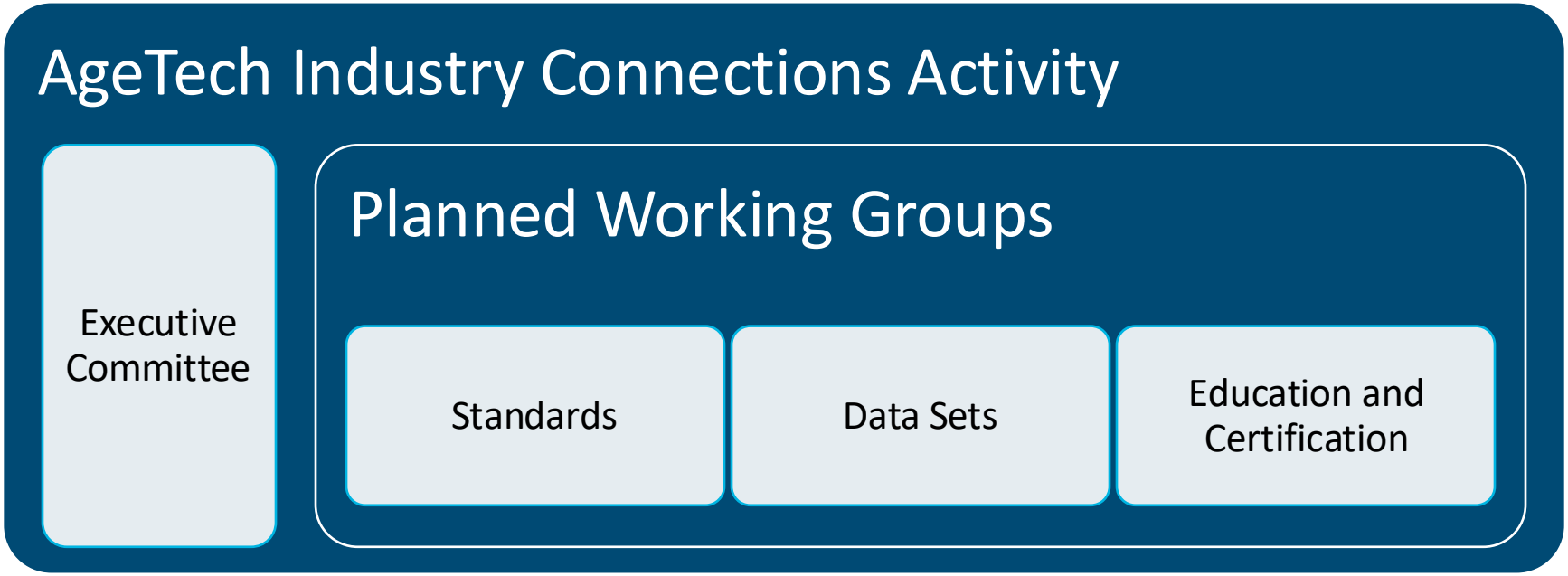
ACTIVITY GOALS, STRUCTURE AND WORKPLAN
- GEORGE ARNOLD

TECHNOLOGY STANDARDS FOR THE AGING ACTIVITY: GOALS

Bring together interested stakeholders to address the following:

- **Develop proposals for IEEE technical standards and certification for AgeTech**
- **Publish data sets to support AgeTech R&D**
- **Develop and deliver IEEE educational resources for AgeTech users and developers**

STRUCTURE


AgeTech Industry Connections Activity
Executive Committee
Planned Working Groups
Standards
Data Sets
Education and Certification

AGETECH EXECUTIVE COMMITTEE

George Arnold, Chair – IEEE Life Fellow, past President of IEEE SA

Mike Andrews, Vice-Chair – IEEE Life Senior Member, past Region 6 Director, Chair IEEE Life Members Conference

Kirpal Khalsa, Secretary – IEEE Life Member

Howard Wolfman – Treasurer, past Chair IEEE Life Members Committee

Richard Caro – co-Founder, Tech-Enhanced Life PBC

Eugene Chang – IEEE Life Senior Member, IEEE Entrepreneurship Coach

Keren Etkin – author of “The AgeTech Revolution”, founding Director at AgeLabIL

John McDonald – IEEE Life Fellow, member National Academy of Engineering

Joseph Wei – IEEE Life Member, Region 6 Director, advisor to VCs with interest in AgeTech

Maria Palombini - IEEE SA, Healthcare and Life Sciences Practice Lead

Shana Pepin - IEEE SA Industry Connections staff

WORK PLAN

Three Working Groups

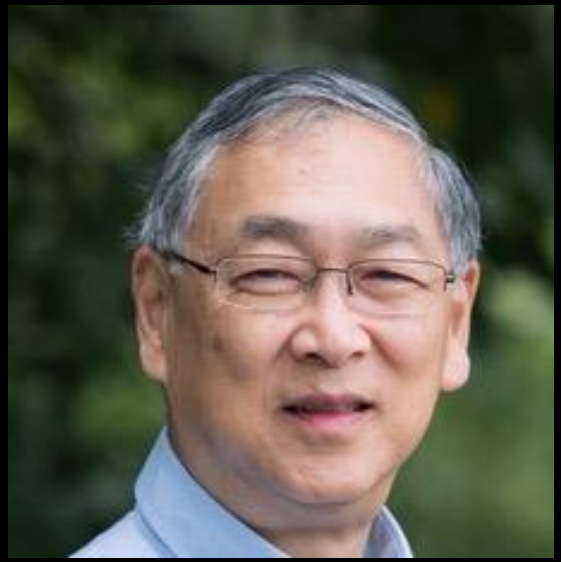
1. **Develop proposal(s) for one or more new IEEE Standards for Age Tech and associated certification**

2. **Solicit and disseminate publicly-available data sets to support research and development of Age Tech products and services through IEEE DataPort**

IEEE DataPort™

3. **Develop and deliver IEEE educational resources to help older adults make effective use of technology for the aging, and encourage developers to use IEEE standards and certification to make products and services "aging friendly"**

- Working Groups will meet virtually via WebEx, collaborate online with iMeet workspace
- Hybrid meeting planned 9-10 June 2025 in Boston area



WHY YOU SHOULD BECOME INVOLVED AND HOW
- EUGENE CHANG

WHY YOU SHOULD BE INVOLVED

Our Lives Will Be Improved with Effective AgeTech Engineering.

- Define the requirements of the AgeTech standard.
- Work with other standards projects to implement AgeTech requirements.
- Build the certification for AgeTech standards.
- Adopting AgeTech certification multiplies our efforts to benefit humanity.

STANDARDS WG

Standards: Usability, Interoperability, Trust, Terminology

- Develop a framework for AgeTech requirements.
- Define AgeTech terminology, safety, interoperability, usability, and security
- Create AgeTech proposals with other standards projects.
- Work to achieve standards agreement

DATA SET WG

- Identify data sets to support each standard project
  - Ensure each standard project has a suite of data sets
- Develop Solicitations for data set submissions
- Reach out to engineering teams to (develop and) submit data sets

EDUCATION & CERTIFICATIONS WG

- Promote the benefits of AgeTech to the users
- Promote the market benefits to the vendors.
- Create a user and vendor consensus for AgeTech certification
- Develop white papers
    - Promote benefits of AgeTech standards (use cases)
    - Promote vendor benefits for AgeTech standard projects (interoperability)
- Deliver Conference Presentations
    - Produce Seminars & Webinars promoting AgeTech standards
- Develop an AgeTech certification program

AGETECH STANDARDS

- The need is clear.
- Make AgeTech standards a reality.
- Join a working group. Join here.

Q&A AND DISCUSSION

NEXT STEPS
- GEORGE ARNOLD

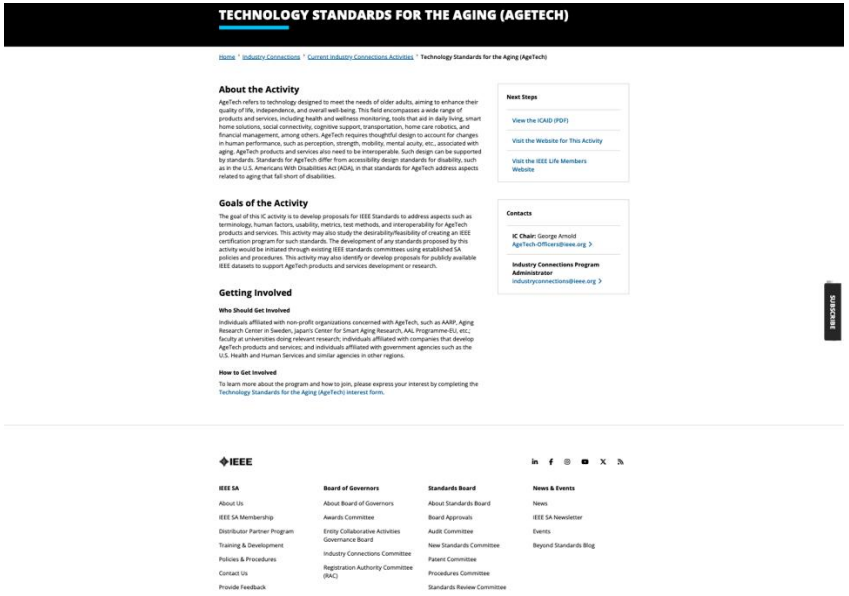
PARTICIPATE!

Whether you are an AgeTech user, developer, researcher, or policy maker, your voice will make a difference in improving technologies for the aging.

- **You do not need to be an expert in standards**
- **There is no cost to participate other than your time**
- **Meetings are virtual and collaboration is online**
- **Join a working group:**
- Standards
- Data sets
- Education and Certification
- **Consider volunteering for a leadership role**
- Working group Chair, Vice Chair, Editor

TO PARTICIPATE GO TO

https://ieeesa.io/AgeTech



THANK YOU

THANK YOU

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