Connected Home Council (CHC) Webinar
Meeting will commence 12:05pm ET
March 12, 2024, 12 PM – 1:30 PM (ET)

CHC Chair: Ken Wacks (Ken Wacks Associates)
Vice-Chair: Charlie Derk (Legrand)

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1. Agenda

Ken Wacks (Ken Wacks Associates)

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2. Call to Order, Welcome, Introductions, About the CHC
3. Administrative
4. Research Update
5. Keynote: How Generative AI Will Impact the Smart Home - Alex Capecelatro of Josh.ai
6. ASHB Journal
7. ASHB Whitepapers
8. ASHB Podcast
9. New Business
10. Announcements
11. Adjournment
Established in 2004, the ASHB Connected Home Council initiates and reviews projects that relate to connected home and multiple dwelling unit technologies and applications. The Council also examines industry opportunities that can accelerate the adoption of new technologies, consumer electronics and broadband services within the burgeoning connected home market.

www.ashb.com/chc
3. Administrative
Ken Wacks (Ken Wacks Associates)

3.1 Motion to approve past CHC Minutes November 29, 2023
www.ashb.com/chc

3.2 Call for CHC Vice Chairs
4. Research Update
Greg Walker (ASHB)

2023 CHC Landmark Research
Smart Home Technology & Market Trends

Funders

Contact Klopotowska@ashb.com to obtain research findings.
4. Research Update
Greg Walker (ASHB)

2024 CHC Landmark Research
Smart Home Trends & Technology Adoption
5. Keynote
Charlie Derk (Legrand)

Keynote Speaker

Alex Capecelatro
Founder & CEO

How Generative AI Will Impact the Smart Home
How Generative AI Will Impact the Smart Home

ASHB Connected Home Council

Alex Capecelatro
CEO, Josh.ai
Who am I?
A New Era Of Smart Home Control
Introducing JoshGPT: https://youtu.be/QbmJJ-rXkjo
AI

What is it?
Generative AI has had the fastest acceptance and usage growth of any new technology to date.
Time to Reach 100M Users

Months to get to 100 million global Monthly Active Users

Google Translate: 78 months
Uber: 70 months
Telegram: 61 months
Spotify: 55 months
Pinterest: 41 months
Instagram: 30 months
TikTok: 9 months
ChatGPT: 2 months

Source: UBS / Yahoo Finance
@EconomyApp
APP ECONOMY INSIGHTS
What exactly is Generative AI?
What exactly is Generative AI?

It’s AI that creates new content based on past content.
Deep Neural Networks

Each neuron is a simple mathematical function that calculates an output based on some input. With the right training data, neural networks exhibit human-like intelligence.
Large Language Models use a transformer architecture, which is designed to process and generate data in sequence, like text.

An LLM effectively predicts which word should follow the previous.

The result of the training process is a neural network with hundreds of billions of connections between millions of neurons.

That said, LLMs produce text that sounds right, but can’t guarantee it’s right.
How much data is needed?

ChatGPT parameter count: 1.5 billion*

GPT-4 parameter count: 1.76 trillion**
Example 1:

What can you tell me about the art series that the inventor of pop art made that showcased in Paris.

The reference appears to be to Andy Warhol's "Flowers" series, showcased at the Ileana Sonnabend's Gallery in Paris in 1965. This series marked a departure from Warhol's obsession with morbid themes and instead depicted a vibrant, modern take on nature's beauty. It's rather charming!
Example 2:

I'm in my house. On top of my chair in the living room is a coffee cup. Inside the coffee cup is a thimble. Inside the thimble is a single diamond. I move the chair to my bedroom. Then I put the coffee cup on the bed. Then I turn the cup upside down. Then I return it to rightside-up, and place the coffee cup on the kitchen counter. Where is my diamond?

When you turned the coffee cup upside down on your bed, the diamond inside the thimble would have likely fallen out onto the bed. The diamond is now on your bed.
Watch out for...

Hallucinations

Bias

Data not real time
Is it all ChatGPT?

OpenAI – ChatGPT and GPT-4

Google – LaMDA PaLM LLM (Bard), now Gemini

Anthropic – Claude 3

xAI – Grok

Meta – LLaMa 2
“Generate a 4k photo of a puppy wearing heart shaped sunglasses eating an ice cream cone”
Or change that to...

“Generate a 4k photo of the pope wearing heart shaped sunglasses eating an ice cream cone”
How will this impact the Smart Home?

1. Automatic custom configurations
2. Content recommendations
3. Camera and security
4. Diagnostics and network management (detect issues)
5. AI assistant for tech support
6. Going beyond control (cooking, information, assistance)
7. A home that actually understands you
But also... be cautious

Deep fakes (impersonating your voice, image)

Video link: https://youtu.be/3wVpVH0Wa6E
Google’s best Gemini AI demo video was fabricated

Google takes heat for a misleading AI demo video that hyped up its GPT-4 competitor.

by Benj Edwards - Dec 8, 2023 4:33pm CET
The future is exciting, I am optimistic, but exactly how it will play out is still evolving.
Thank you

Alex Capecelatro
alex@josh.ai
6. ASHB Journal
Ken Wacks (Ken Wacks Associates)

The ASHB Journal aims to educate and inform the ASHB membership and industry at large on emerging research, issues, challenges, and opportunities in the intelligent buildings and/or connected home sectors.

New articles are posted to the ASHB website, included in the weekly NewsBrief, and circulated on Twitter and LinkedIn.

Send proposals to admin@ashb.com

Recent posts:
- Ken Wacks Perspectives: The Business Case for Energy Management
- Ken Wacks Perspectives: CES 2023: A Sampling of Product Diversity
- Facilio: The Relevance of Decarbonizing Goals During the Downturn
7. ASHB Whitepapers
Ken Wacks (Ken Wacks Associates)

Published IBC White Papers can be downloaded at:
www.ashb.com/whitepapers

Send proposals to admin@ashb.com
Join industry experts and leaders from around the globe as they discuss everything smart home and intelligent buildings.

ASHB is looking for guests and hosts for future pre-recorded episodes. Contact admin@ashb.com for more information.

Recent Recordings:
- Solar Energy is a Team Sport: When OEMs and Installers Collaborate for Quality
New CHC Business?
10. Announcements
Charlie Derk (Legrand)

Upcoming Events

Connections (Parks Associates)
May 7-9 | Dallas, TX
(Virtual - June 13 & December 12)

Shanghai Smart Home Technology
September 3-5 | Shanghai, China

CEDIA Expo
September 5-7 | Denver, CO

Smart Spaces (Parks Associates)
September 24-25 | Richardson, TX
(Virtual - March 21, July 23, December 12)
Next CHC Meeting: May 2024

Association for Smarter Homes & Buildings (ASHB)
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