



The Digital Human Body of Knowledge

- Health Variant -

Strategy
Co-Design
Corpus
Operating Model

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Concept	Definition	Example
Co-Design	<p>Co-design is a lifecycle process not an event – that is, co-design is not a one off event or deliverable. Co-design does not assume a “solution” but rather is about understanding the background, the emotions, and day to day lives of people in their search for information, services, and engagement. The key point is not starting with a “solution” and getting “input” – this is a common fundamental error.</p> <p>Understanding the emotions is a key component of co-design, as emotions – frustrations, anxiety, confusion and desire – all drive interactions and conversations which may or may not be efficient or productive and may impact brand. In relation to co-design for a digital human, the co-design lifecycle process contemplates brand and personality from the outset.</p> <p>The co-design lifecycle for a digital human is an architecture of componentised and commoditised assets, processes and accelerators.</p>	<p>In the health industry, the co-design process for a cardiac coach digital human would involve the people who are likely to be impacted by or will benefit from the process and/or the outcome, either directly or indirectly – importantly for cardiac patients and their families, the co-design process creates a shared understanding of the emotions throughout their journey (see below) and the gaps in the current model.</p>
Persona	<p>A persona is a realistic description of a fictitious person that embodies typical characteristics of the potential user/client group. The work with personas is about using the everyday experiences of people, their experiences and their needs as a starting point when developing new products or services. This leads to inclusion of the users' perspective in all aspects of the co-design lifecycle process. Personas help you notice and amplify experiences and emotions that otherwise go un-noticed.</p>	<p>The co-design architecture contains a series of candidate personas in different industries. A persona for a premium beauty brand is very different from a persona involving an emergency in the utilities sector – in this example, the different personas represent different emotions, desires and journeys</p>
Customer Experience Pathway	<p>The customer experience pathway is a visualisation –created through co-design – from the perspective of the customer</p>	<p>Many organisations mistakenly look at the interaction between the customer and the</p>

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	<p>experience, and their community. The customer experience pathway is a representation of how people feel, their apprehension, who they trust, their excitement, and who and what influences their opinions and contact with the organisation.</p> <p>The customer experience pathway helps to explain what's happening and predict what will happen – in this sense, the experience pathway is very different from a business process diagram.</p>	<p>organisation from the <i>organisation's</i> perspective – this is classic in health services.</p> <p>From the health customer experience perspective, the overall journey is disjointed, confronting and depersonalised.</p> <p>The customer experience pathway illustrates the interaction with health providers as a small but extremely frustrating subset of the customer's overall health journey.</p>
Friction Factors	<p>Psychological (emotional and character) attributes of a human persona that can slow or hasten a conversation with a digital human. These can vary for the same persona over different domains and industries.</p>	<p>Friction factors need to be taken into account when re-using or co-designing interaction models. For example, in the situation of an earthquake people would likely to be very anxious and in need of information – these are the friction factors in this instance. The interaction model (see below), would be co-designed for quick responses and no chit-chat for example.</p>
Features	<p>Features are elements such as maps, graphics, video. Features can be combined through co-design to achieve an experience. Sourced via pre-existing assets or specifically commissioned.</p>	<p>For example, how a map integrates with the service management process for a utility handled via a digital human omni-channel.</p>
Content	<p>Content is information contained in a feature. A particular feature such as a map could contain different content.</p>	<p>For example, a map being a feature – might contain content relating to “electricity outages”. The same map (feature) might</p>

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		also contain content relating to “telephone outages”.
Embodiment	Embodiment is a co-design process that gives human form (physical, behavioural) to the concept of empathetic AI. An embodied entity (digital human) can reproduce; develop; grow; interact; exist in time and space; and evolve. Embodiment reflects and connects engaged entities. Embodiment is necessary for empathetic conversations and relationships.	In the case of the digital human, elements of embodiment include: personality; appearance; face; voice; knowledge; gestures; and language. A digital human representing an adventure sports brand for example, would have a personality and appearance reflective of adventure.
Context	Together with embodiment, context is a determinant of and influencer of brand and personality. Whilst embodiment can be thought of as the design factors that give shape to the human form of the digital human, context can be thought of as the environmental, community and cultural determinants of the initial co-design and ongoing evolution of the digital human.	Contextual elements include: community; culture; industry; policy; and whether the purpose of the digital human is to serve (internal or external customers) or influence and grow a fellowship.
Domain	Domains are groups of like interaction models from which conversations can be co-designed and constructed for specific industries.	Examples of domains include general information; specific information; advice; coaching; assistance; and influencing. In the domain “general information”, there would be common patterns of interaction across a number of industries – for example “how do I?”
Conversation	A conversation is co-designed to comprise one or a number of interaction models.	For example, in the health industry, a cardiac coach digital human conversation could be comprised of the interaction model relating to “general information” about cardiac health; the interaction model relating to “specific information” on recommended

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		medications; and a “feature” of a map showing information about walking groups.
Interaction Model	<p>An interaction model is a pattern of questions; statements; clarifications; pauses and tempo; length of responses; handoffs; escalations; taxonomy; topics; related topics; intents; chit chat.</p> <p>Interaction models can be common across industries.</p>	<p>An interaction model can be re-used almost completely across similar industries and geographies: for example different utility organisations in different geographies could re-use the interaction model for “how do I”.</p> <p>Other interaction models could be built upon through co-design.</p>
Language Model	Domain specific words, phrases; culturally specific slang or references.	Industries such as utilities have words with particular meaning often defined by industry practice and compliance standards. Different gov programs have specific phrases. Language models are largely replicable.
Memories	A memory is a lived experience of a real human captured in stories, news, photos, video (GoPro etc.), music, sounds, text written by or about a person, maps of where they have travelled.	For example, co-designing a brand ambassador that has “lived” the company ethos (eg mountain climber) but there are no photos of a specific mountain
Digital Influencers	<p>Currently social media is a platform for celebrities, politicians and activists to influence through the amplification of their personality and message. This is the current paradigm of digital influences.</p> <p>In the digital human economy, digital humans will be the new digital influences through their <i>own</i> existence, fellowship and brand.</p>	<p>A digital human digital influencer could be a copy of a real human celebrity</p> <p>There could also be a digital human digital influencer specifically created for a cause or brand.</p>
Operational Model	The Operational Model describes the various types of activities necessary for the co-design and sustainment of a digital human.	The Operational Model should be owned and operated by a dedicated multi-disciplinary

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	<p>The Operational Model is the orchestration of activities across the organisation's functional areas, to achieve the layers of embodiment and context that define the unique attributes of personality and brand. This is not an IT function.</p>	<p>strategic unit embedded in the brand / communications/marketing area.</p>
Digital Immortality	<p>Refer to paper published on Medium on 5 January 2018: <i>"Immortality is available now — and it's not as science fiction predicted"</i></p> <p>https://medium.com/@mariehjohnson/immortality-is-available-now-and-its-not-as-science-fiction-predicted-4bafa7a9655f</p>	