Additional File 4

42 initial rough theories were generated by the study team

EDI Framework Principle	Prompting question	Initial Rough Theories
Context specific and community-based knowledge	Has the Context specific and community-based knowledge been impacted by the pandemic? How?	Context specific and community-based knowledge is key to co-design, of which input from Engaging marginalized, stigmatized, and underrepresented groups has been negatively impacted by the pandemic. Context specific and community-based knowledge is key to co-design, of which inclusion of the lived experiences, their voices and input in the co-design has been negatively impacted by the conditions of the pandemic. Context specific and community-based knowledge is key to co-design, of which the utilization of Storytelling as a technique has changed during the pandemic. Context specific and community-based knowledge is key to co-design, and while developing the right co-design activities and techniques were always challenging, the pandemic has limited these techniques in different ways. Context specific and community-based knowledge is integral to effective co-design and participation, diverse representation being a key component that has been negatively impacted by the conditions of the pandemic. Context specific and community-based knowledge is integral to effective co-design and participation, enabling a diversity of perspectives, a key component that has been negatively impacted by the conditions of the pandemic.

		Context specific and community-based knowledge is key to co-design, of which diverse representatives and perspectives have been negatively impacted by conditions of the pandemic access.
Accessibility	Has Accessibility been impacted by the pandemic? How?	Accessibility is a key component of co-design practices, of which digital access and tool use are prerequisites for participation during the pandemic. Accessibility is a key component of co-design practices, of which digital literacy skills are prerequisites for participation during the pandemic. Accessibility is a key component of co-design practices, of which equitable access & support are negatively impacted by the pandemic. Accessibility is a key component of co-design practices, of which types of communications are positively impacted by the pandemic. Accessibility is a key component of co-design practices, of which sharing knowledge is restricted and negatively impacted by the pandemic.
Safety	Has Safety been impacted by the pandemic? How?	Safety is integral to co-design practice to ensure individual, group and cultural safety which has been negatively affected by the pandemic. Safety is integral to co-design practice to ensure a safe and encouraging space for discussion which has been negatively affected during the pandemic. Safety is integral to co-design practice to ensure a sense of identity which has been negatively affected during the pandemic.

		Safety is integral to co-design practice to being engaged, integrated, motivated, and valued which has been negatively affected during the pandemic. Safety is integral to co-design practice to ensure engaged, integrated, motivated participation which has been negatively affected during the pandemic. Safety is integral to co-design practices, of which well-being in virtual environments has emerged as a consideration during the pandemic. Safety is a key component in co-design practices of which privacy and confidentiality was positively impacted by the conditions of the pandemic.
Creativity and making	Has Creativity & Making been impacted by the pandemic? How?	Creativity and making is a key component of co-design practices, of which Sustaining engagement has become more challenging due to the digital transition during the pandemic (Even though collaboration and diversity of participants have increased during the pandemic, sustaining engagement has become more challenging). Creativity and making is a key component of co-design practices, of which Creativity and engagement has been negatively impacted by the conditions of the pandemic (Keeping participants engaged in an in-person session is easy, but the pandemic and the online transition have made it challenging for facilitators). Creativity and making is a key component of co-design practices, of which Collective making has been positively impacted due to diversity in populations and flexibility of time.

		Creativity and making techniques in co-design are highly playful and interactive but the pandemic and the online transition have negatively impacted the engagement process. Creativity and making is a key component of co-design practices, of which changes in the creation of materials and prototypes have been highly affected the creativity and engagement of participants. (Keeping participants engaged in digital activities is difficult compared to creating physical prototypes in in-person sessions) Creativity and Making is central to co-design practices, of which materials and prototypes are key components that have been negatively impacted by the conditions of the pandemic. Creativity and Making is central to co-design practices, of which participatory methods are key components that have been negatively impacted by the conditions of the pandemic.
Timeline and pace	Have timeline & pace been impacted by the pandemic? How?	Challenges for timeline and pace, for recruitment, participation, retention in co-design and participation, the pandemic conditions made this worse. Allowing timeline and pace for iterative processes and prototyping in co-design is key, the pandemic conditions made this less achievable. Accelerating timeline and pace informs who was left out and who was able to take part, and the pandemic conditions made this worse. Maintaining timeline and pace in co-design is key, of which flexibility is negatively impacted by the pandemic.

Democratic practices	Have democratic practices been impacted by the pandemic? How?	Democratic practices such as shared decision making about and ownership of process and outcomes are essential to effective co-design, but these practices have been negatively affected during the pandemic. The democratic practice of dismantling power differentials (managing power dynamics) is key to effective co-design democratic practice, but these practices have been negatively affected during the pandemic. Democratic practices such as sharing data capture and analyzing data are key to effective co-design, but these practices have been negatively affected during the pandemic. Democratic practices such as composing the appropriate team for co-design activities is essential, but the pandemic conditions made this more difficult and compromises necessary. Democratic practices such as the ability to acknowledge and address systemic oppression within co-design was always difficult, but the pandemic conditions made this more difficult. Democratic practices advocacy for change is an important part of the results of co-design, but the pandemic conditions reduced opportunities for advocacy.
Capacity building and empowerment	Has the Capacity building & empowerment been impacted by the pandemic? How?	Capacity building and empowerment is integral to co-design and participation, providing training, learning, and development opportunities is a key component that has been negatively impacted by the conditions of the pandemic. Capacity building and empowerment is integral to co-design and participation, co-creating with

		community is a vehicle for achieving this that has been negatively impacted by the conditions of the pandemic. Capacity building and empowerment in co-design and participation is supported by information sharing and exchange, this has accelerated during the pandemic. Capacity building and empowerment with relationship building and trust is integral to co-design; the conditions of the pandemic make relationship building and trust very hard to establish. Capacity building and empowerment relies on transparency in co-design, the conditions of the pandemic reduced transparency.