This paper describes the Playware ABC concept, and how it allows anybody, anywhere, anytime to be building bodies and brains, which facilitates users to construct, combine and create. The Playware ABC concept focuses engineering and IT system development on creating solutions that are usable by all kinds of users and contexts in our globalized society. The result becomes solutions that are highly flexible and adaptable to different contexts, users, and applications. The paper gives examples of how playware becomes a disruptive technology for global development, for instance in the health sector.