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Legal Entity in Electronic Commerce*

Information technologies today are already no longer to be qualified merely as technological environments of communication, but beyond that constitute a new sphere of social life, the particularities of which result from the actual demeanor of human users, who are increasingly committed psychically and socially, in matters of cognition and emotions. But it is thanks to these special materialities of technological communication-systems that human beings may meld into new functional entities of body, mind and artificial medium.

These specific prerequisites of communication within social information technology affect the legal attribution of identity and action and thus issues of liability in electronic commerce. In this social sphere acting humans are almost no longer to be identified. On the contrary, there are new functional chains, which may be viewed as sociotechnical ensembles of human beings and things, whose artificial parts, at times, seem to function as independent actors.

The more and more dense hybrid linkage of human beings and non-human systems show not only in the specific constellations of human actors and technological control systems or in the recent developments of the "Internet of Things and Services" or even in the field of "Ambient Intelligence", "Ambient Assisted Living" or "Cyber-Physical Systems". Rather, there are many pertinent constellations of events to be observed in everyday electronic commerce, which much in the same way deal with liability for the, from a human point of view, less and less controllable processes of information technology systems.

For example, if user accounts, WLAN-connections, auction platforms or online for are abused for infringements by anonymous perpetrators, practically the only liability claim in question would be a claim against the operator of the site. Whether he is liable as an "indirect interferer" and may be liable to omit and resolve these actions, will regularly depend on the question, if the duty to control and act is socially expectable in the individual case.

This question is answered in very different ways by courts considering isolated cases. The required analysis of probabilities of abusive and preventive potentials is often done by the court itself, depending on their own expertise, deriving rules of the prima facie evidence. In this way, the German jurisdiction, in the areas of competition and intellectual property law,

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starts to view the responsible operators as direct offenders, as perpetrators of an anticompetitive violation or a violation of protective rights.

These jurisdictive developments show that responsibility for the violation of law seems to no longer be limited to the individual human being, but refer to "associations" of human beings and information technology systems and is thus broadened.

In this context, finally such "human-being-and-thing-associations" are to be identified, which are linked so loosely, that their artificial parts appear as independently operating actors: Information law thus has to deal with an increasing number of software agents and autonomous programs, whose legally acting performance almost no longer may be traced back to the will of a human being to declare something and act legally. For this reason, systematical solutions no longer are only sought-for from a perspective of tort law, but have to start at the level of the legal reconstruction of electronic, agent-mediated legal acts. At the center of the correlating problems of attribution will lie the question, in how far such autonomous agents represent personal elements of specific human beings or shall be attributed to other spheres of risk, maybe even shall be viewed as legal part-persons. Insofar information technology systems on the one hand form new, externalized fields of personality development and on the other hand new social actors, it seems conceivable, in principle and on certain conditions, to attribute personhood also to non-corporal, non-living artifacts of information technology. But limitations derive from the fact that information technology systems, despite their complexity and communicative capabilities, mostly are not viewed as conscious, perceiving, social, able of imitation, let alone living beings. Thus, it is to be assumed that artificial actors in legal matters will be continuously be "personified" in a way that suits the technical medium, rather than alive human beings.

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