



BRIEFING NOTES

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REQUIREMENTS FOR AI LIABILITIES, ACCOUNTABILITY AND ROLE OF EXPLANATION

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SUMMARY

- ✚ Liabilities for designers and agencies that use Artificial Intelligence (AI) systems should be properly addressed by public policy decision makers and law makers.
- ✚ The above should be addressed as soon as possible, since ambiguities associated with them will impede the path toward the next generation of AI systems and stifle investments in this field.
- ✚ Design failure lawsuits in case of AI systems may not be appropriate. Treating AI systems in the same manner as man-made and operator mistakes do seem to fit more this context, while notwithstanding and considering the similarities and differences between humans and AI systems.
- ✚ Being accountable is the key attribute to secure trust by users and the society. There should be procedures and policies established by agencies in order to ensure that there are separation boundaries of accountabilities for products and services.
- ✚ Algorithm Impact Assessment (AIA) is procedure that should be followed in designing autonomous or semi-autonomous AI-based software to ensure that products and services have net benefit for the society while simultaneously minimizing their negative impact.
- ✚ AIA facilitates and allows designers to ensure that their responsibilities are followed and governments do ultimately hold designers accountable. However, in case of AI systems due to their complex structure, the AIA implementation requires that the system be designed such that its behavior can be made explainable as opposed to a black box structure.

CONTEXT

- ✚ Whereas designers and agencies using AI systems are subject to legal obligations arising from their products or services, potential lawsuits, at minimum, hinder the path in testing and rolling out of new technology.
- ✚ Accountability represents a clear acknowledgment and assumption of responsibility and answerability for actions, decisions, products, policies, and services. It is a key attribute and characteristics of designers in order to be trusted by the society.
- ✚ Agencies should ensure their responsibilities are fulfilled before putting their products or services on the market and governments should hold them accountable subsequently.
- ✚ Although AI systems are internally complex even for experts to fully comprehend how they will behave in future, this reality should not become an excuse for agencies that use these products and designers, designing these products to flinch from their responsibilities.

CONSIDERATIONS

- ✚ Design failure lawsuits, that are common in many circumstances, due to their high costs, ambiguities, will further impact companies and discourage them in investing on this new technology, since it is not straightforward to ensure responsibility borders of the resulting products.
- ✚ Due to the above considerable impacts, liability models should address these issues since any ambiguity could result in lag in the path towards next generation of AI systems that would attract investments.
- ✚ Most of the AI system issues are patchable, and can be easily solved even without recalling the products. This gives another indication in inappropriateness of impact of design failure lawsuits, which usually force the companies to recall their targeted products.
- ✚ AI systems are intrinsically complex, and even for experts it is challenging, if not impossible, to fully realize their internal structure resulting from such behaviors. This further makes the situation much harder for agencies to ensure and define the accountability borders while also guaranteeing the AI technologies performances.
- ✚ Standards for agencies should properly take into account the trade secrets and should not be such that it imposes high risks of revealing trade secrets, or it should address the challenges between designers and agencies properly.
- ✚ There should be proper guidelines for engaging relevant communities that may be negatively affected by the consequence of AI systems in operating their systems.

NEXT STEPS (If applicable)

- ✚ Treating AI systems in the same manner as treating humans that make mistakes will more properly fit the context. Hence, instead of design failure lawsuits, negligence civil laws and criminal law models should be properly adapted to fit in this context.
- ✚ In doing so limitation and also differences of AI systems when compared with humans such as lack of general knowledge about contexts in AI systems should be addressed by lawmakers. These limitations should be properly communicated to users, otherwise designers could be held accountable and responsible.
- ✚ In case of liabilities, AI systems should be considered as an innocent person, and responsibilities and liabilities should be properly shared among the people and agencies.
- ✚ Each agency that aims using AI systems in fully autonomous or semi-autonomous decision support systems should go through the AIA procedure. This would lead to disclosure that informs the public about the system, its purposes, policies in utilizing these systems, and the accountability borders.
- ✚ Explainability, which is a system property that enables evaluation of the decision-making processes should be encouraged. It enables post verification of the system and facilitates the implementation of the AIA procedures.
- ✚ Governments and users should not over-trust the AI systems, and should actively monitor the agencies update regarding their AI utilities. One needs to be more actively involved in and governments should educate people associated with these new technologies.