Indicative Public Value Mapping of Artificial Intelligence Exercise







The Public Value Creation paradigm extends the value chain to incorporate effects, and trust and legitimacy as part of the outcome process





Source: Adapted from Amrani et al., 2022.

Framework for Assessing the Effectiveness of Artificial Intelligence on Public Value Creation







ECLAC

Adapted from Amrani et al., 2022

Economic Dimension

Category	Component	Charac
Benefits	Costs	
	Efficiencies	
	Automating	
	processes	
Threats / Considerations	Costs	
	Resources	
Risks	Economic harm	









Administrative Dimension

Category	Component	Charac
Benefits	Security and accuracy	
	Sustainability	
Threats / Considerations	Competence	
	Infrastructure	
	Data availability	
	Legality	
Risks	Security	
	Integrity	









Democratic Dimension

Category	Component	Charac
Benefits	Citizen interaction	
Threats / Considerations	Accountability	
	Cooperation	
Risks	Transparency	
	Trust	
	Democracy	





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Citizen Dimension

Category	Component	Charao
Benefits	Service quality	
	Personalization	
	Accessibility	
Threats /	Service quality	
Considerations		
Risks	Data quality	
	Loss of jobs	







Economic Dimension

Category	Component	Charact
Benefits	Costs	Adopting the AI system should reduce the ROI.
	Efficiencies	The AI system should make the process more
	Automating processes	Al systems should be used in different ways
Threats / Considerations	Costs	The cost to develop new technological solution will increase.
	Resources	Limited network infrastructure and capacit processing and response time of systems.
Risks	Economic harm	Al can lead to discrimination, lower trust democracy functions.





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- overall cost of operations with maximum
- e efficient and effective and save time.
- to automate operations.
- utions, particularly within AI are large and
- ty, particularly latency, could challenge the
- , cause economic harm and affect how

Administrative Dimension

Category	Component	Charact
	Security and	Workflow processes of administrative record
	accuracy	for staff, which can lead to mistakes. The add
Benefits		frees case handlers to focus on more compl
	Sustainability	Artificial intelligence models can be used
		optimize processes and integrate value chai
	Competence	An adequate number of skilled individe
		developing and using AI technology is critica
		level of knowledge and competence in
		sustained uptake.
Threats /	Infrastructure	Various types of computation, network and
Considerations		ensure the full development and utilization of
	Data	Al models also require access to large dat
	availability	would be the ability for these data sets to be
	Legality	Requisite laws, regulations, policies, an
		appropriate protections.
INITED NATIONS	Security	As AI systems become more advanced an
		vulnerability and exposure to cyberattacks.
	Integrity	Data integrity can be compromised, leading
		including data manipulation that could lead



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ds can be monotonous and time-consuming option of AI to process workflow processes **lex cases**, with a **reduced risk for mistakes**. to achieve **higher levels of sustainability**, **ins**.

uals with the requisite knowledge foral. Further, there should be at least a basicAl within the broader society to foster

d technology infrastructure are required to of AI within the public sector.

a sets for training. Critical, in this regard, e combinable with different data.

d procedures are necessary to ensure

d connected, there is a risk of increased

ng to **inaccurate outcomes and decisions**, to **misinformation**.

Democratic Dimension

Category	Component	Charact
Benefits	Citizen interaction	Automating various processes to leverage processing systems, can improve citizens' co
Threats /	Accountability	If the society is to accept the growing role human intervention, data protection, transp ensure public trust that the systems are ac explainable .
Considerations	Cooperation	Al deployment across public sector agen absence of inter-agency cooperation in res competency could, for example, lead to unit each agency "reinvents the wheel".
Risks	Transparency	Unexplainable AI and other Blackbox AI undermine fairness, predictability and trans
	Trust	Overly optimistic reliance on AI and overly trust, particularly when systems are in the impacting their long-term adoption.
	Democracy	Al can lower the threshold of attacks a misinformation and the perpetuation of bia





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e AI tools, such as ChatBots and voice ontact experience.

e of AI in areas which previously included parency, and **ethical AI** use are required to **ccountable and outcomes predictable and**

ncies should be fairly homogenous. The earch, development, data availability, and necessarily onerous adoption costs where

algorithms can lead to outcomes that sparency in the delivery of services.

y pessimistic scepticism can erode public heir nascent phase of deployment, thus

against democratic functionality through as found in training data.

Citizen Dimension

Category	Component	Charac
Benefits	Service quality	The opportunity to implement assessme capability can contribute to improving the
	Personalization	As a result of their built-in capabilities for letter the customer and adapt the interaction to
	Accessibility	Adopting AI systems in the public sector access to services , both in terms time of service.
Threats / Considerations	Service quality	The use of supplemental and other types could raise questions regarding ownership ,
Risks	Data quality	Inaccurate and otherwise undesirable resinsufficient, such as data transcription error inaccurate sources and labelling of data.
	Loss of jobs	Risk for job loss is not limited to mer professional positions, whose process of a repetitive.





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nts and analyses that are beyond human quality of service delivered to citizens.

earning, AI systems are able to **understand** ensure a better user experience.

provides citizens with **increased levels of** day, as well as location for accessing the

of data to compliment the primary corpus, **quality assurance** and **accessibility**.

oults can pose a risk if the data quality is ors, systemic faults in data collection, and

nial operations, and could include paraanalysis can be categorized as routine and





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Thank you!

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