

CHANCE FOR SCIENCE CONFERENCE 2022

LEIPZIG UNIVERSITY



**THE ROLE OF ARTIFICIAL INTELLIGENCE IN TRANSFORMATION THE ENTERPRISE
TO THE INTELLEGTENT TYPE IN THE CONDITION OF CONVERGENCE
OF THE INTELLECTUALIZATION AND DIGITALIZATION OF THE ECONOMY**

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GERMANY-UKRAINE – 2022

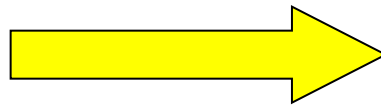
NEW CHALLENGES OF VUCA AND BANI MODELS

From 1980th
by cold war



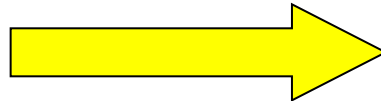
From 2020th
climate and system global
changes

VOLATILITY



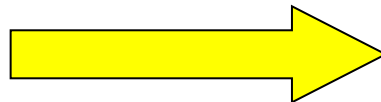
BRITTLE

UNCERTAINTY



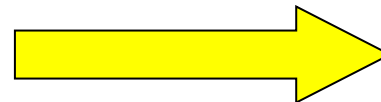
ANXIOUS

COMPLEXITY



NONLINEAR

AMBIGUITY



INCOMPREHENSIBLE

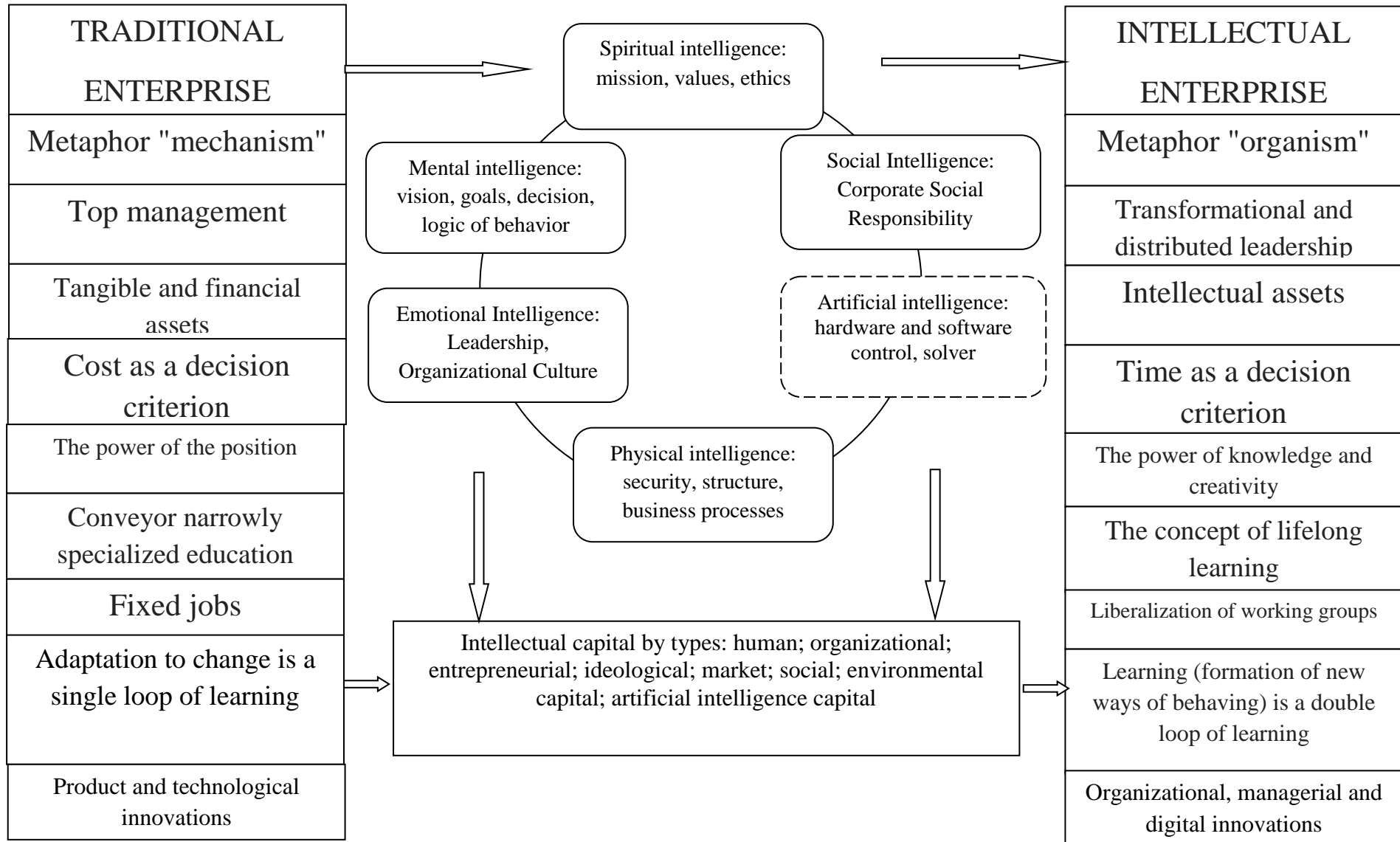
THE NEEDS WHICH MOTIVATE ENTERPRISES TO DEVELOP IN BANI'S WORLD

- the first of them is need of existence which can be realize as a system of norms and procedures to achieve sustainable development and espessially economic development;
- the next one is the need for communications and industrial relations that activates connections between the external environment and an industrial enterprise and leads to innovative and technological development;
- the third one the need for growth by the knowledge management to create additional value for consumers and profit by intellectual capital. Realization of this need leads to organizational development.

COMPARATIVE ANALYSIS OF TRADITIONAL AND INTELLIGENT ENTERPRISES

TRADITIONAL ENTERPRISE	INTELLIGENT ENTERPRISE
Metaphor "mechanism"	Metaphor "organism"
Top management	Transformational and distributed leadership
Tangible and financial assets	Intelligent assets
Cost as a decision criterion	Time as a criterion for decision making
The power of the position	The power of knowledge and creativity
Conveyor narrowly specialized education	The concept of lifelong learning
Fixed jobs	Liberalization of working groups
Adaptation to change is a single loop of learning	Learning (formation of new ways of behaving) is a double loop of learning
Product and technological innovations	Organizational and managerial and digital innovations

SHIFT IN MANAGEMENT PHILOSOPHY DURING THE TRANSITION FROM TRADITIONAL TO INTELLIGENT ENTERPRISES



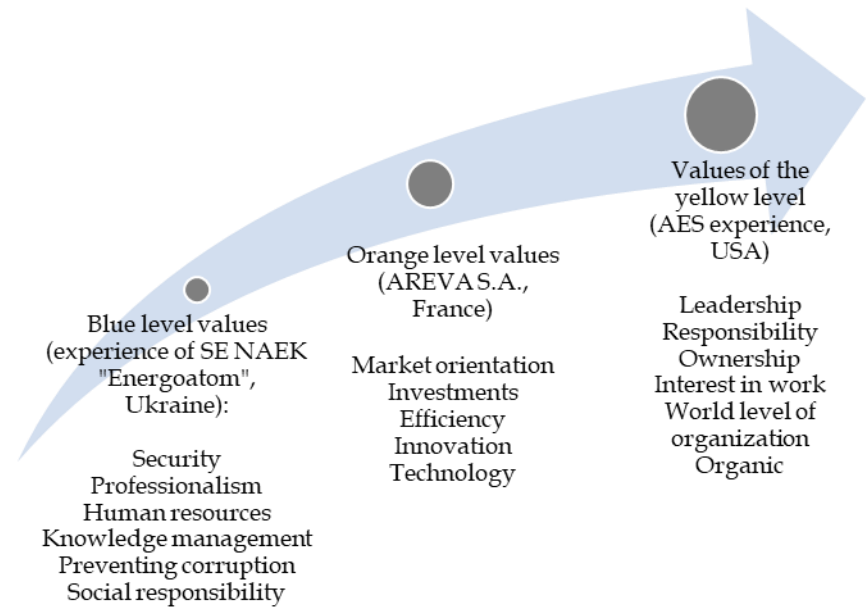
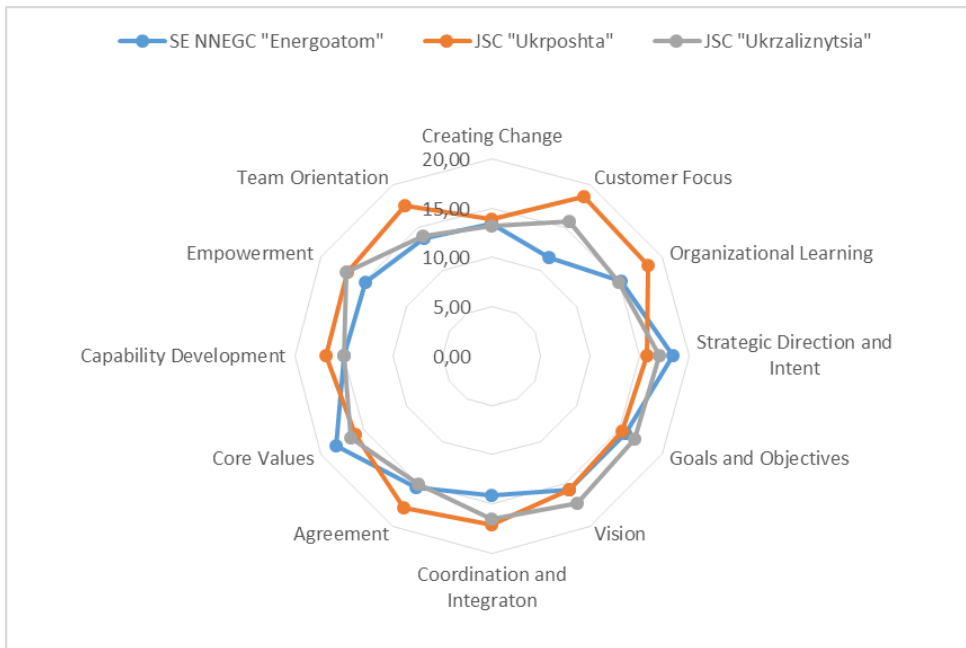
THE COMPLEX STRUCTURE OF THE COMPONENTS OF INTELLECTUAL CAPITAL

Classification for structure	Type of intellectual capital	Intellectual resources
1. Individual component	Human capital	Knowledge, skills, competencies, experience, moral values, creativity
2. Organizational component: internal structure	Organizational (structural) capital	Organization of labor and production, organization of management: organizational structure, business processes, managerial decisions, information, hardware, software, patents, licenses, etc.
	Partner (entrepreneurial) capital	Leadership, emotional climate, organizational culture
	Ideological capital	Vision, mission, values, ethics
3. Organizational component: external structure	Market (client) capital	System of business relations with clients, trademark (brand), sales channels
	Social capital	Corporate social responsibility
	Environmental capital	Environmental safety in the long run
4. Artificial component	Capital of artificial intelligence	Methods and algorithms, knowledge base, solver and intelligent interface

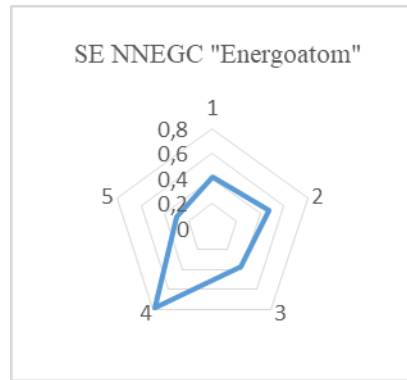
Source: author's development

RATIO ANALYSIS OF CHARACTERISTICS OF ORGANIZATIONAL CULTURE SE NNEGC "ENERGOATOM", JSC "UKRPOSHTA" AND JSC "UKRZALIZNYTSIA" FOR THE MODEL BY D. DENISON, 2019

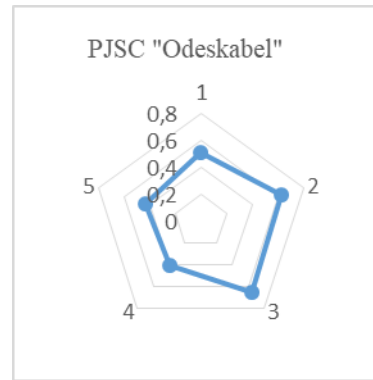
THE EVOLUTION OF THE VALUES OF ENERGY COMPANIES: THE EXPERIENCE OF UKRAINE, FRANCE, USA



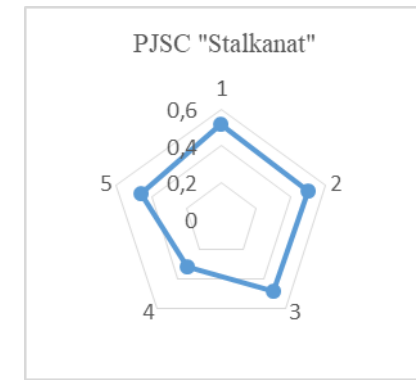
PROFILES OF DIGITAL ORGANIZATIONAL CULTURE OF ENTERPRISES



$I_{doc}=0,468$



$I_{doc}=0,524$

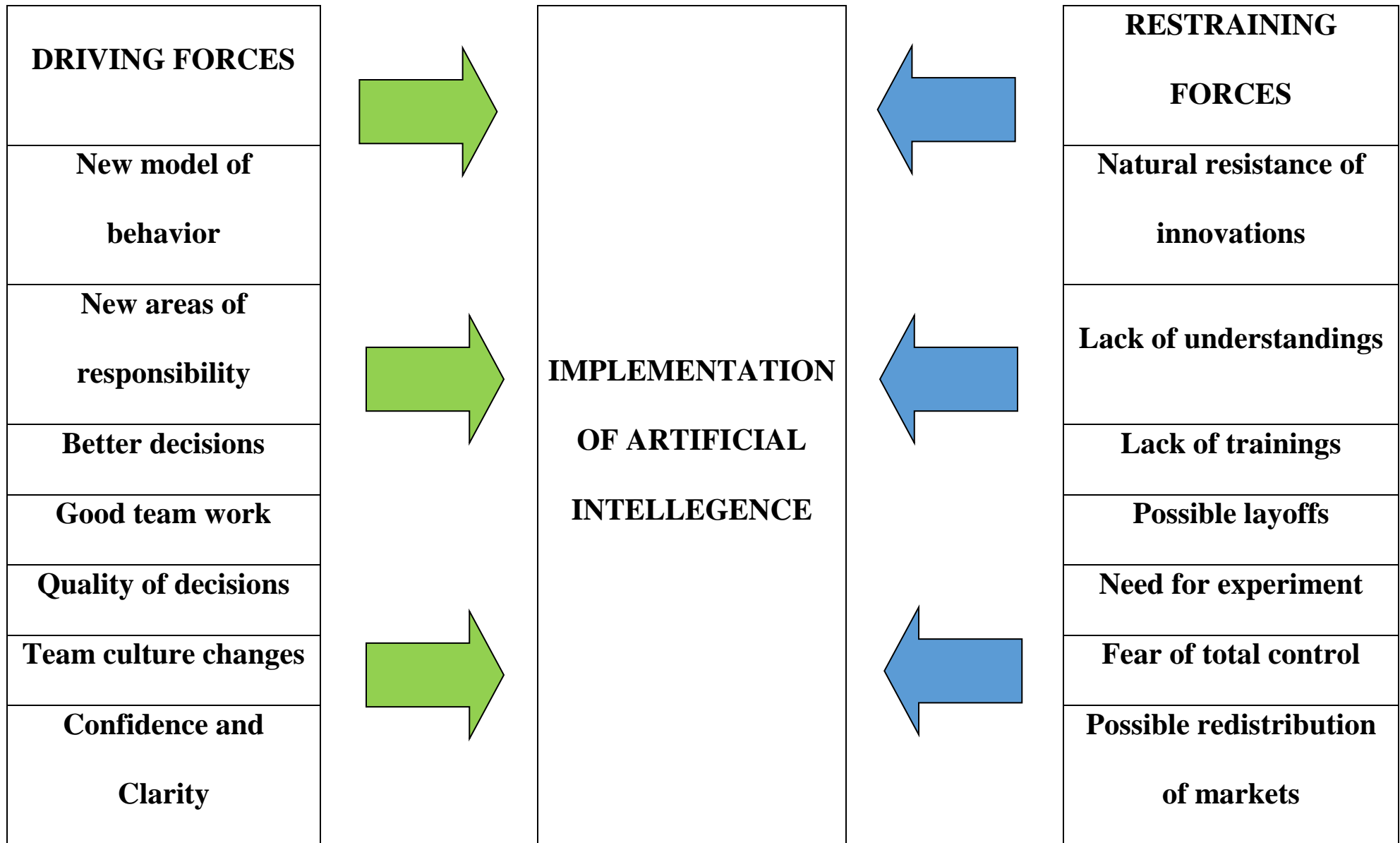


$I_{doc}=0,456$

THE MAIN CHARACTERISTICS OF A DIGITAL ORGANIZATIONAL CULTURE

CUSTOMER FOCUS	INNOVATION	COOPERATION	TRANSPARENCY	DECENTRALIZATION
Digital culture involves the adoption of strategic and tactical decisions based on customer feedback and opinions (customer profile; data-based decisions; data management capabilities; employee attitudes towards customer orientation; customer centricity)	Understanding by an industrial enterprise of the value of adaptability, flexibility, creativity when dealing with difficulties and changes (flexibility of the workplace, budgets for innovation, speed of implementation)	Creation of conditions for joint work and increase of involvement (digital organizational networks, efficiency of teams, cross-functional groups)	Strong digital culture requires regular exchange of information with honest feedback both in the medium-sized industrial enterprise and with stakeholders (information flow, communication tools)	Breadth of authority and generation of ideas for management decisions (authority for management decisions, the coordination process, the generation of ideas by employees)

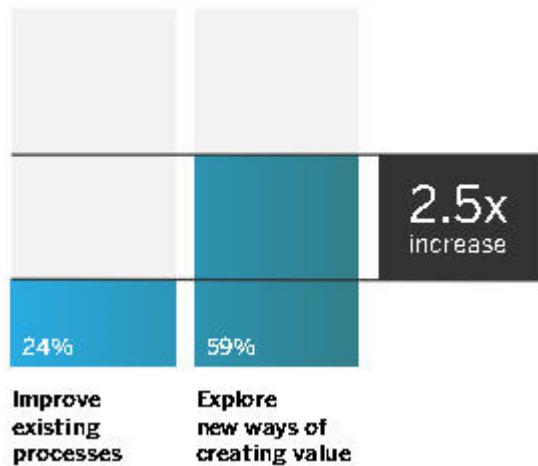
IMPLEMENTATION OF ARTIFICIAL INTELLIGENCE BY K.LEWIN'S MODEL



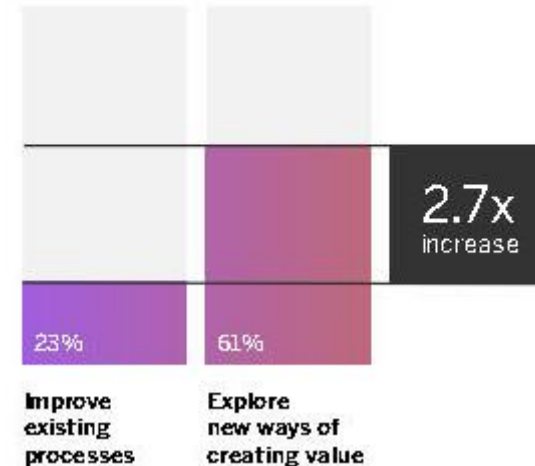
ARTIFICIAL INTELLIGENCE AND COMPETITIVENESS

Organizations that report greater competitiveness from AI are focused on creating new value with AI

Organizations that feel prepared to **defend against competitors** from adjacent industries primarily use AI to...



Organizations that feel prepared to **capture opportunities** from adjacent industries primarily use AI to...



percentage of respondents who has been closely involved with the project team whose workflow used AI

The cultural benefits of artificial intelligence in the enterprise/ Sam Ransbotham, François Candelon, David Kiron, Burt LaFountain, and Shervin Khodabandeh / *MIT Sloan Management Review*. November, 2021

THANK FOR YOUR ATTENTION!

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<https://scholar.google.com.ua/citations?user=h0PdLJsAAAAJ&hl=ru>

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