Blockchain:
Transformation of NATO Logistics Capabilities

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Agenda

➢Introduction

➢Blockchain Technology Awareness

➢Transformation in NATO Logistics

➢Summary of the Survey Results

➢Conclusion

Introduction
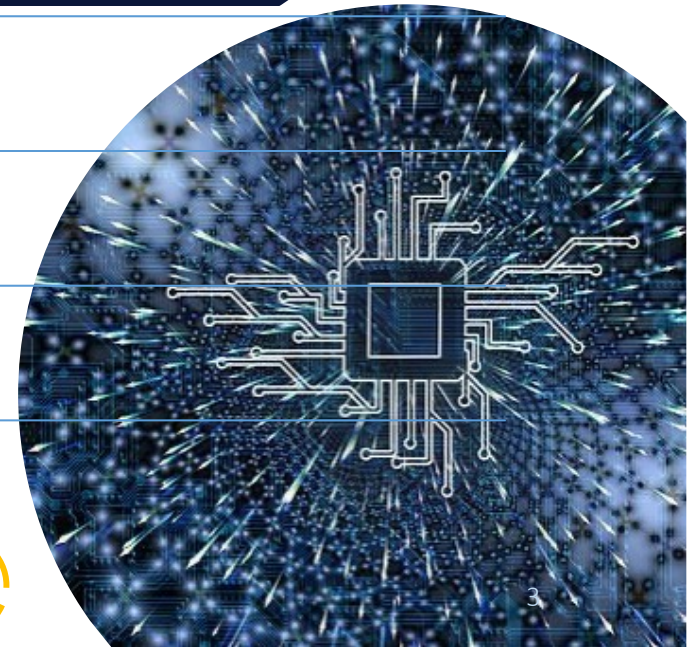
Strategic advantage

Data

Blockchain Revolution

Putting Blockchain to use in NATO

Blockchain CoI

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Blockchain Definition

A business network that is used between peers to exchange value. Value can be currencies, tracking information, or anything that interested parties require to be maintained on the blockchain ledger.*
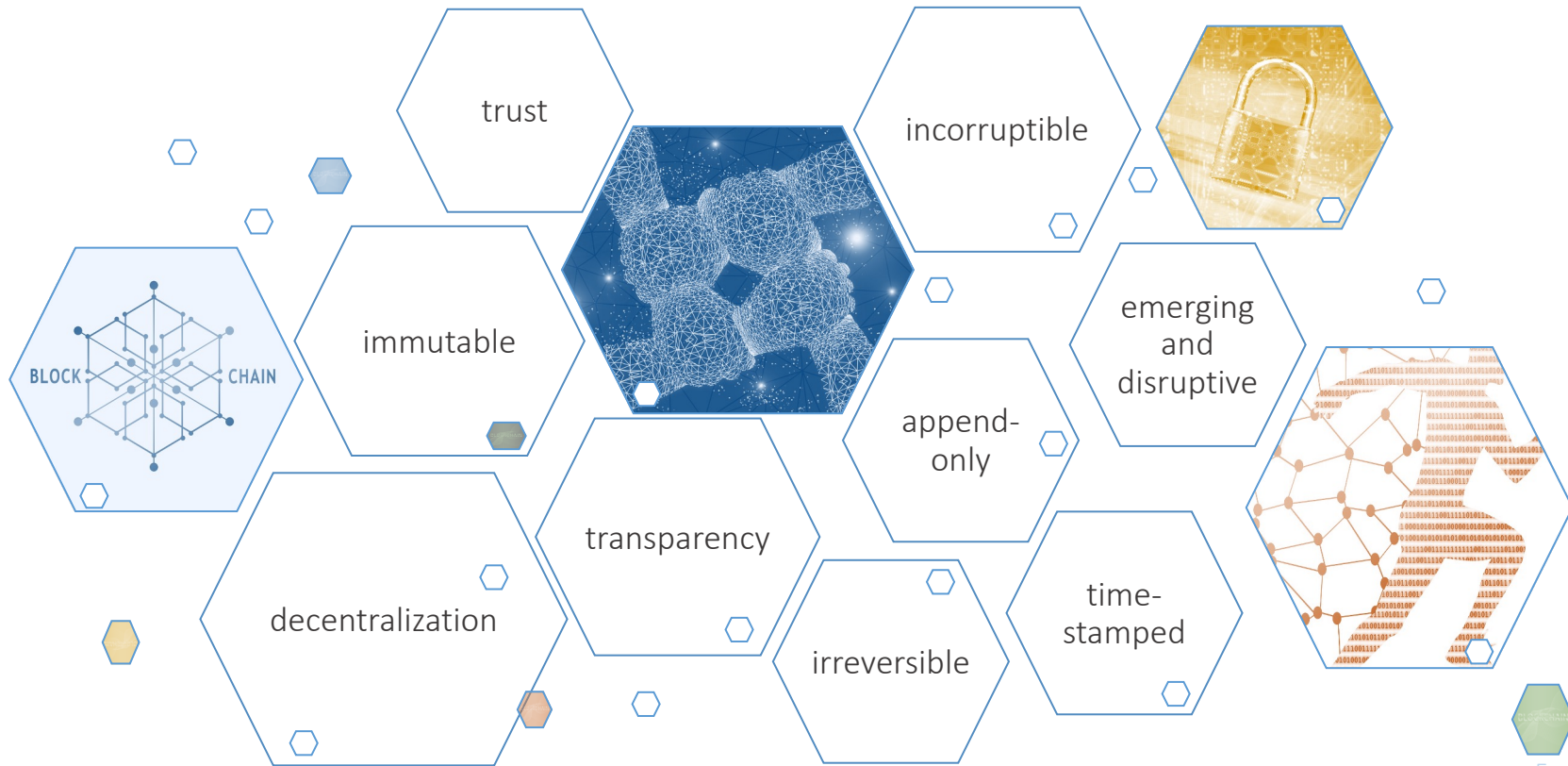
*Joseph Holbrook

A distributed digital military ledger that is used between nations of alliances to exchange defence logistics value. Defence logistics value can be recognized logistics picture, asset tracking information, cross border paper-based documents, or anything that interested military units require to be maintained on the blockchain ledger to improve digital backbone of sustainability.
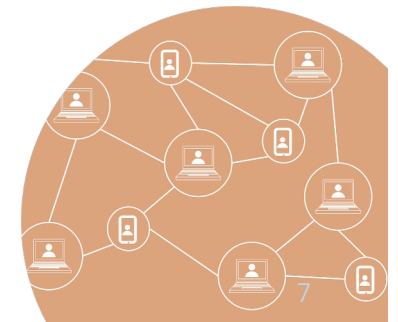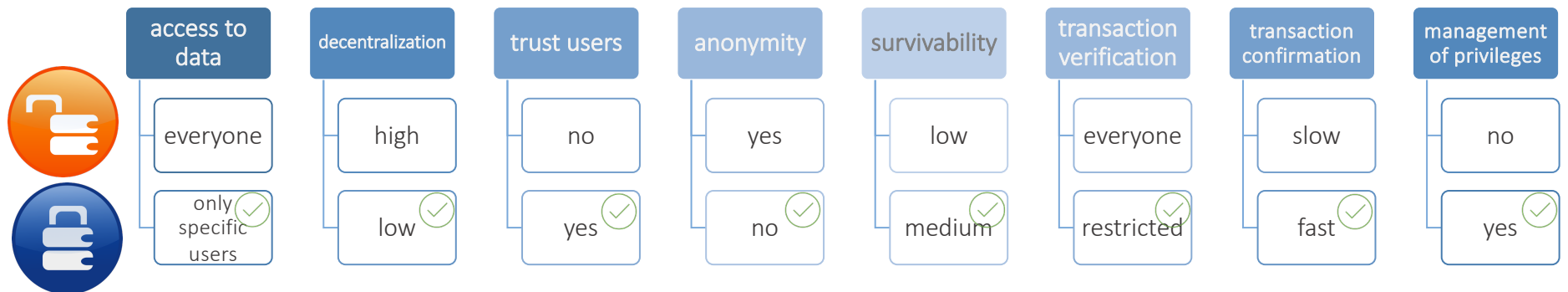
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Blockchain Technology Features

trust

incorruptible

immutable

emerging and disruptive

append-only

transparency

decentralization

irreversible

time-stamped

Blockchain Technology Applications and Opportunities

Managing content, Certificates, Learning outcomes evaluation

Health records, Managing supply chain and prescriptions

Cryptocurrencies, contracting, clearing, settling, record-keeping

Smart cities, Transportations, e-Passports, Digital IDs

Market exchange, Insurance, Resource management, Supply chain, Rights management

Imagine a smart military base

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Public(permissionless) vs.Private(permissioned)

access to data	decentralization	trust users	anonymity	survivability	transaction verification	transaction confirmation	management of privileges
everyone	high	no	yes	low	everyone	slow	no
only specific users ✓	low ✓	yes ✓	no ✓	medium ✓	restricted ✓	fast ✓	yes ✓

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Blockchain Technology Key Actors

| IT experts | think tanks | consulting companies | academia | standardization organizations | policy makers | China Russia | advanced technologies |

Blockchain Technology Awareness-5
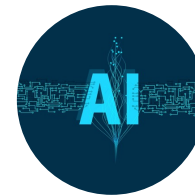
Transformation in NATO Logistics

...the existence of operational necessity for digital transformation to achieve cross-domain operations, optimize effects and to conserve Command and Control superiority
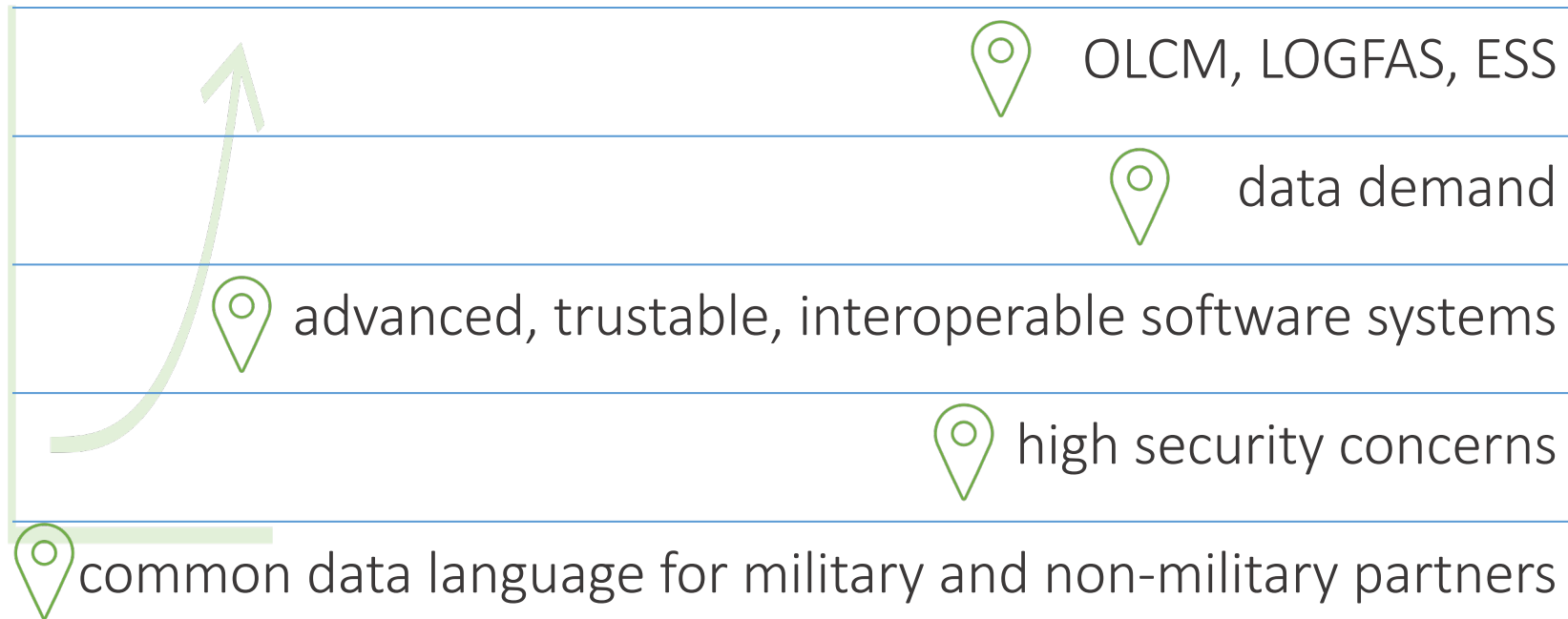
SACT, General Philippe Lavigne

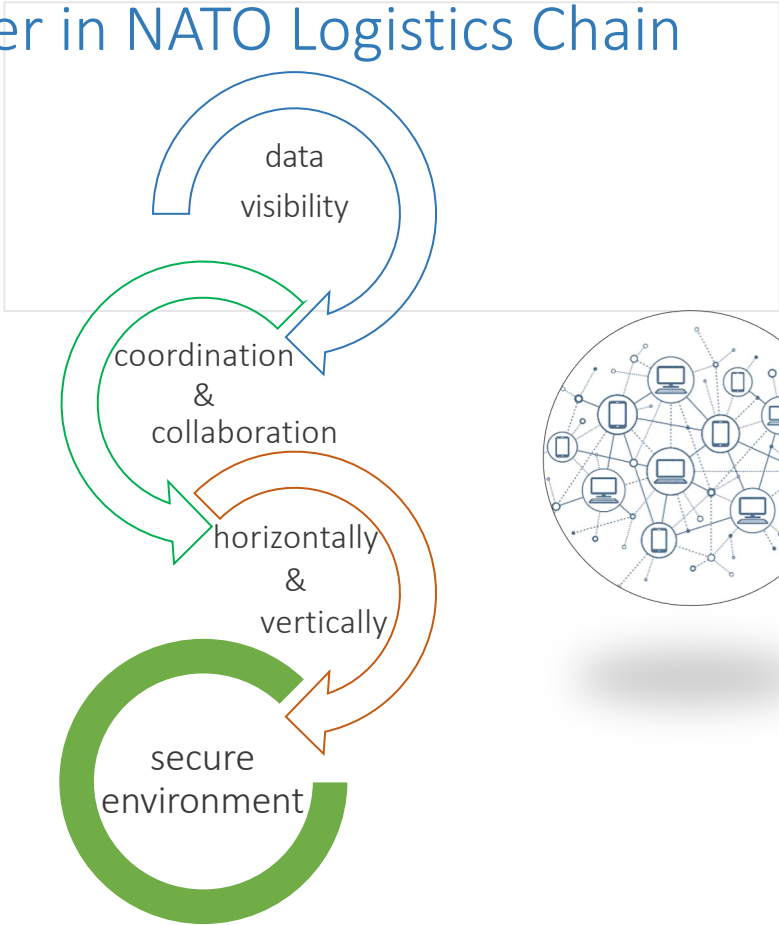*...transforming the Alliances from a platform centric organization to a secure data centric organization.*

..interoperability still remains essential for success, but it is not an obstacle

DCOS CD, Lieutenant General David Julazadeh

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Where are we in NATO Logistics ?

OLCM, LOGFAS, ESS

data demand

advanced, trustable, interoperable software systems

high security concerns

common data language for military and non-military partners

Transformation in NATO Logistics-2

Decentralized and Trustable Ledger in NATO Logistics Chain

WHERE

data visibility

coordination & collaboration

horizontally & vertically

secure environment

Summary of the Survey RESULTS

How can we transform and develop

NATO

logistics capabilities

by using

blockchain?

r e s p o n d e n t s

53

15

54%
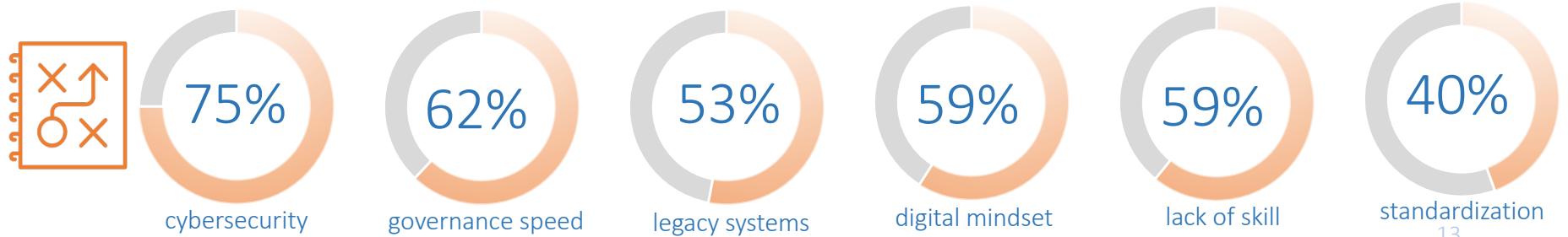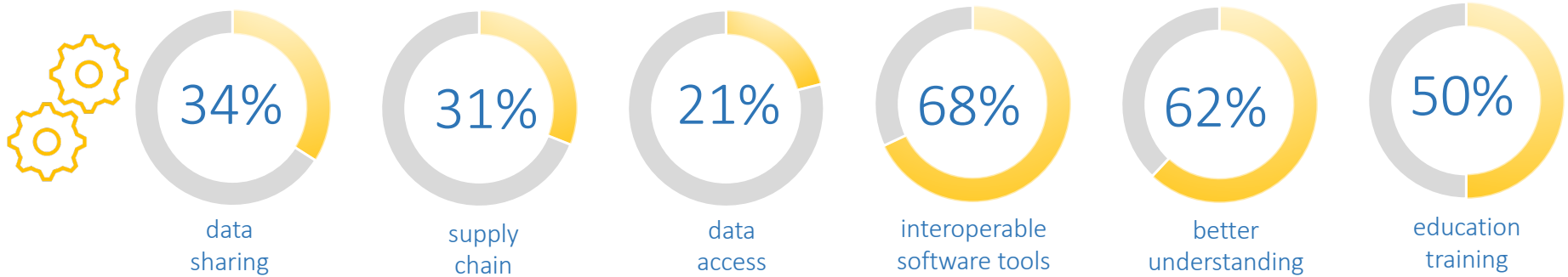
47%

Summary of the Survey RESULTS

34%	31%	21%	68%	62%	50%
data sharing	supply chain	data access	interoperable software tools	better understanding	education training

75%	62%	53%	59%	59%	40%
cybersecurity	governance speed	legacy systems	digital mindset	lack of skill	standardization

Summary of the Survey Results-2
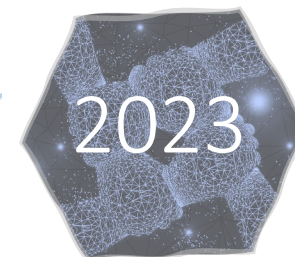
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Conclusion

diversified technology portfolio

blockchain technology pros & cons

decentralized & trustable ledger

terminology & standards

humble ledger in NATO logistics chain

2023

Join us

Thank you!...

improving today
shaping tomorrow
bridging the two

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