



Innovarpel 2025

TECHNICAL DAYS

**DIGITAL TRANSFORMATION
& INDUSTRIAL CYBERSECURITY**
IN THE OIL&GAS INDUSTRY



JUNE, 24 & 25
Rio de Janeiro, Brazil

Anatomy of a Cyberattack

Alexánder Fonseca Moya

Chief Information Officer

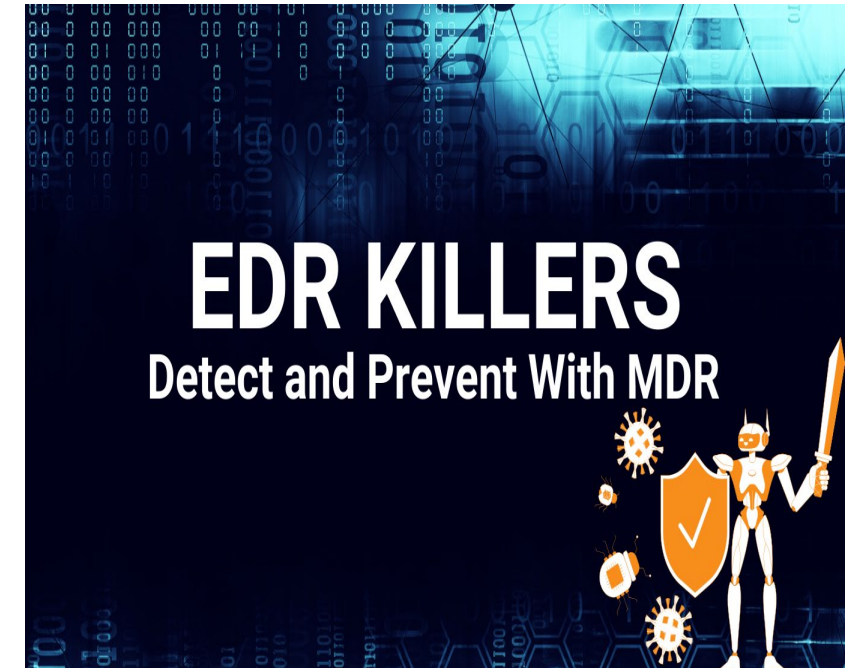
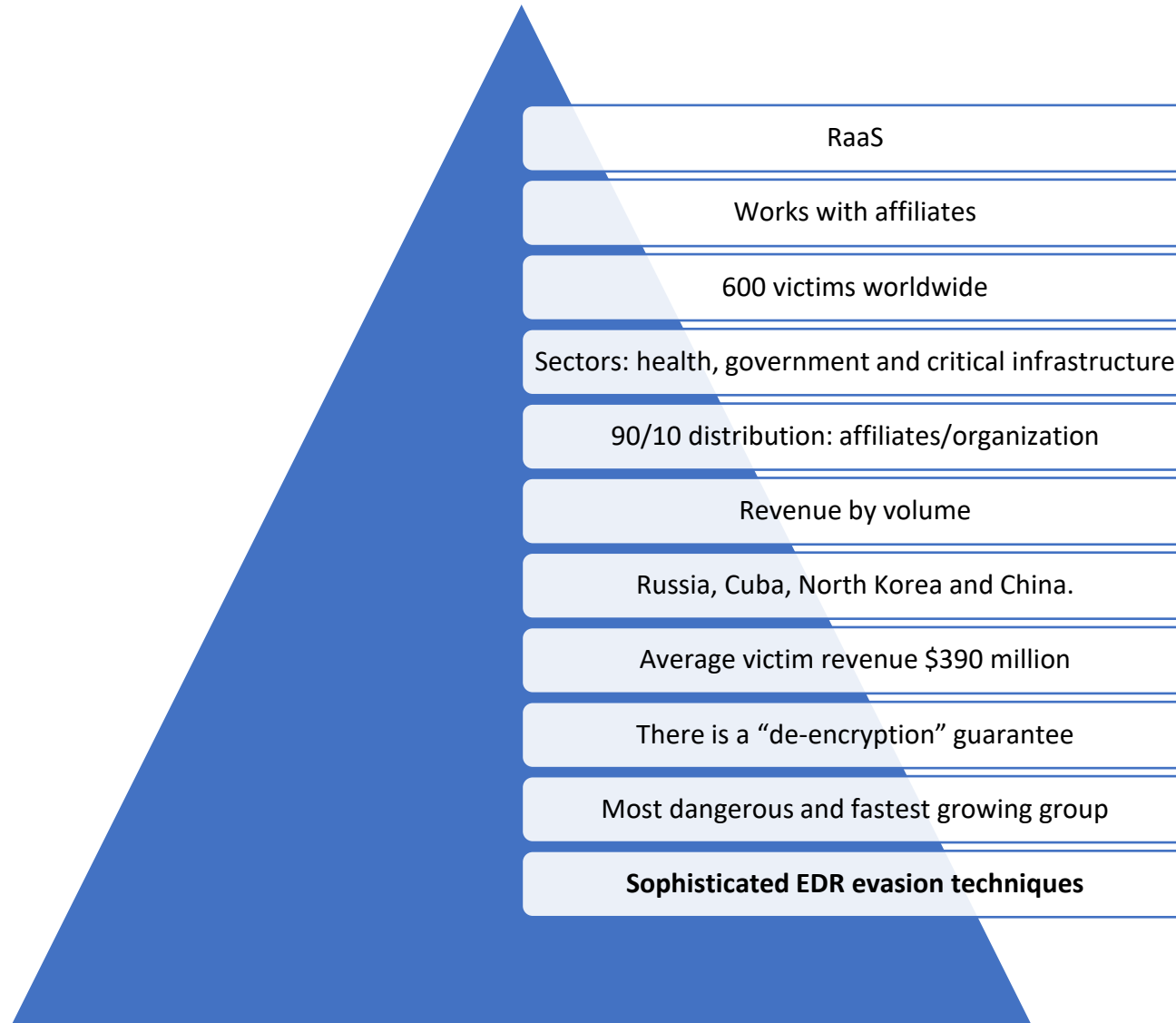


CHRISTMAS

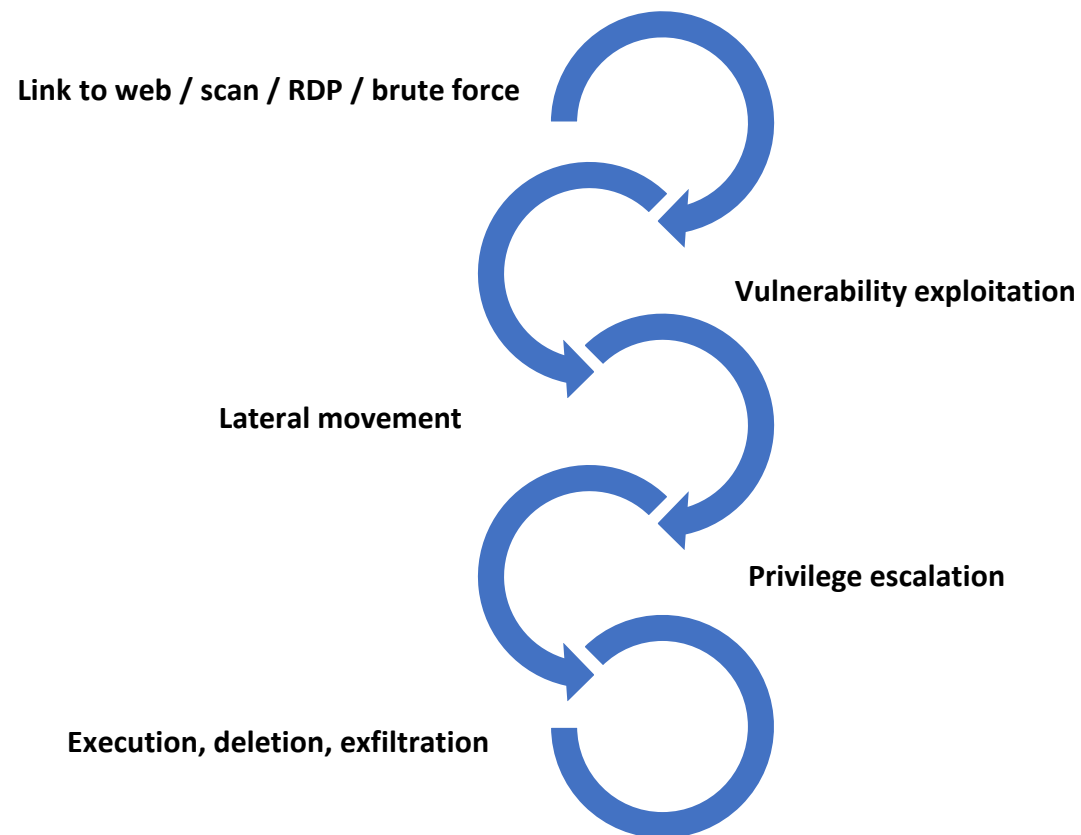
IS AROUND
THE CORNER



Attacker/Victim profile



How did it happen? Phishing?



¿What was the impact?

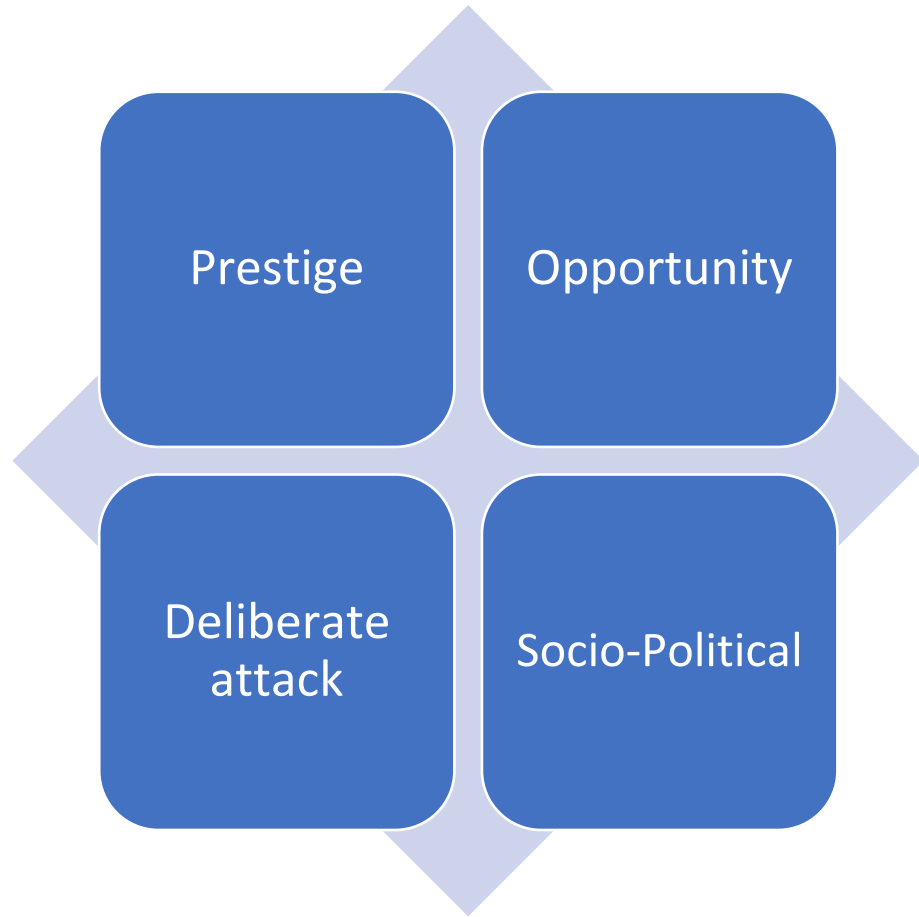
Affected

- IT network
- Commercial systems
- Servers
- Systems

Not affected:

- End Points

¿Why were we attacked?



First minutes...

Containment	Turn off Internet
	Hijack computers
	Activate protocols
	Contingency
	Turn off equipment *
	Inform the authorities



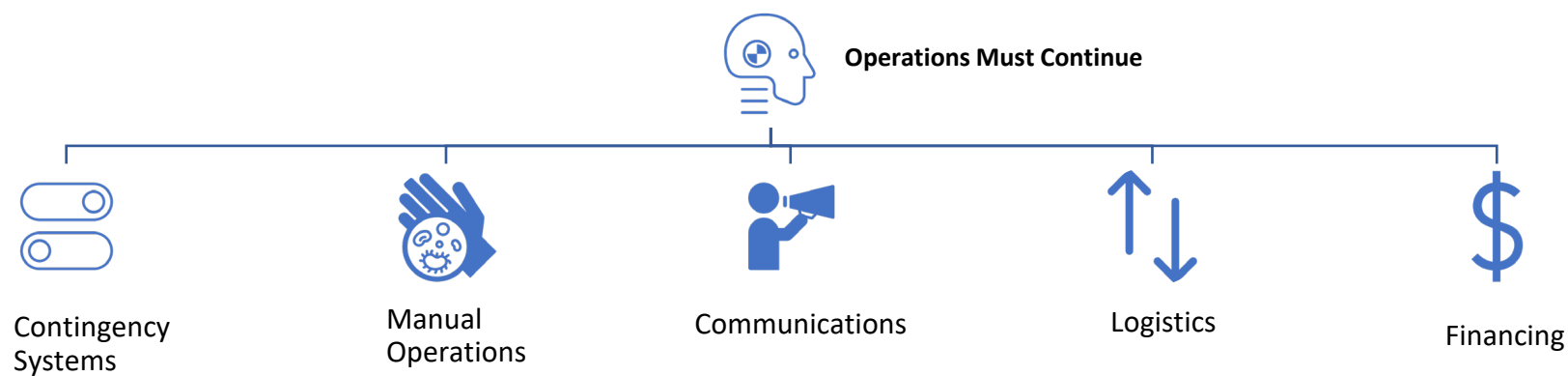
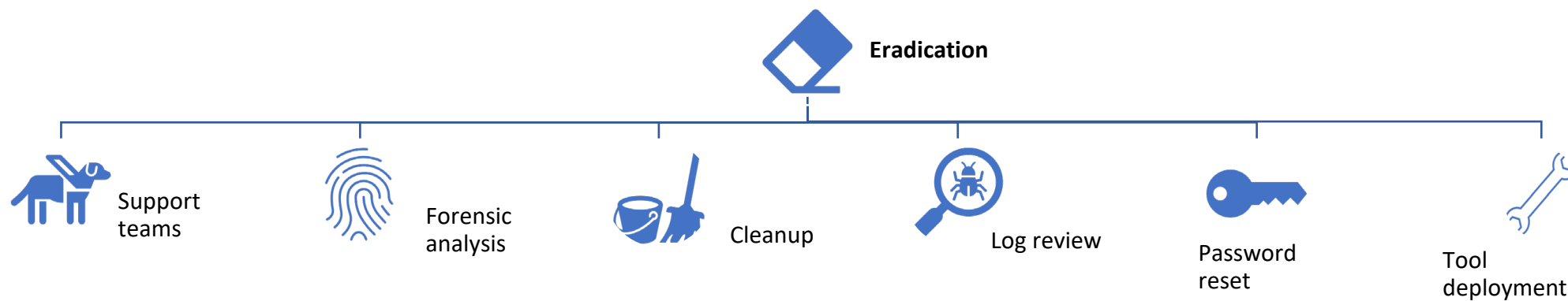
Early hours...



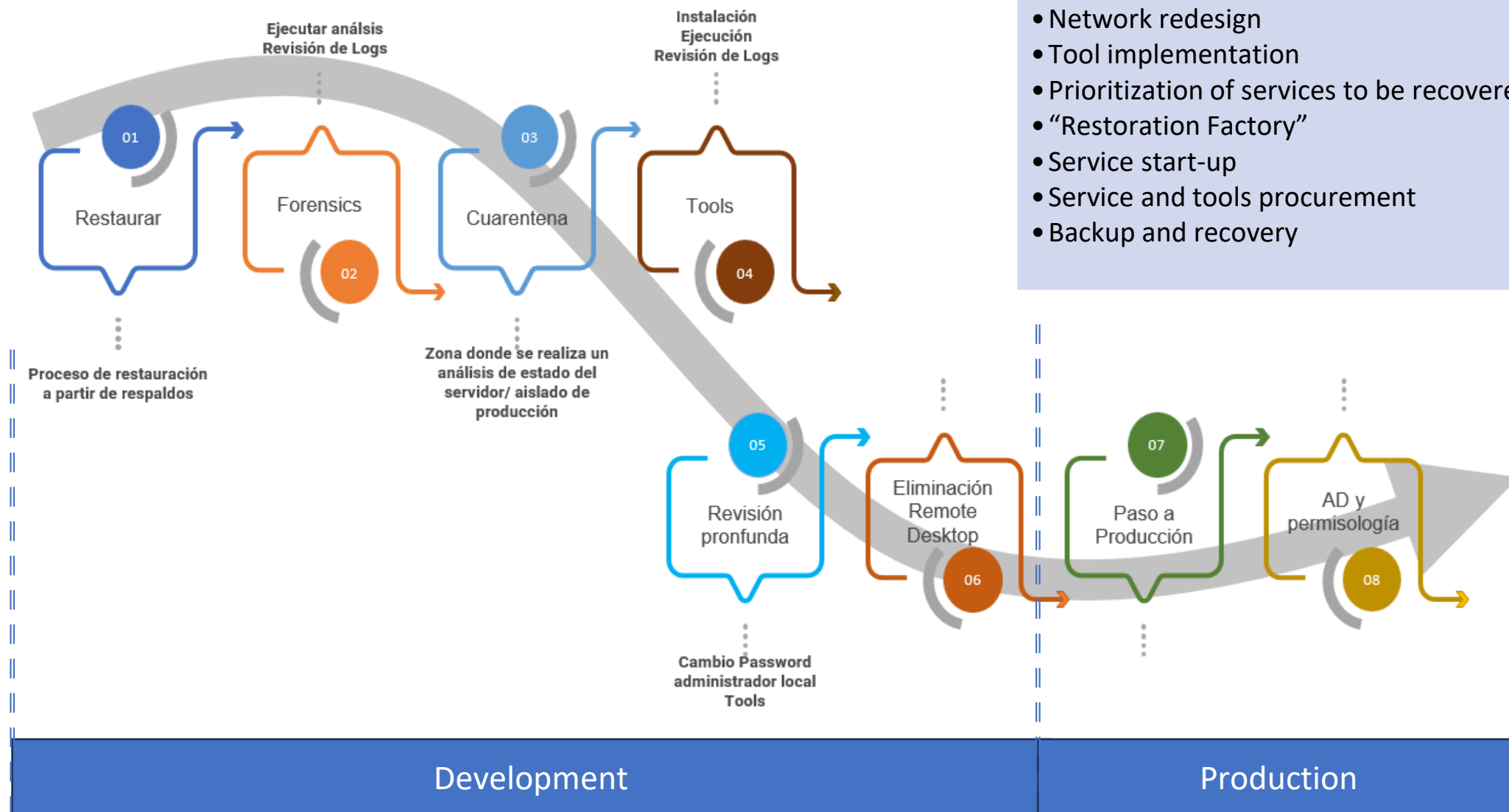
**FOLLOW
ALTERNATE
ROUTE**



First Days...



First Months





Lessons Learned

Keep Calm

Education

Monitoring

Visibility

Multi-Factor Authentication

Tools, AI

USB Lock

State Art

Local keys

Backup Strategy

Credential Vault

Magnetic Tape



Lessons Learned

Physical and logical segmentation

Information Security Management System

Roles and responsibilities

Compliance

Vulnerability Analysis

Inventory

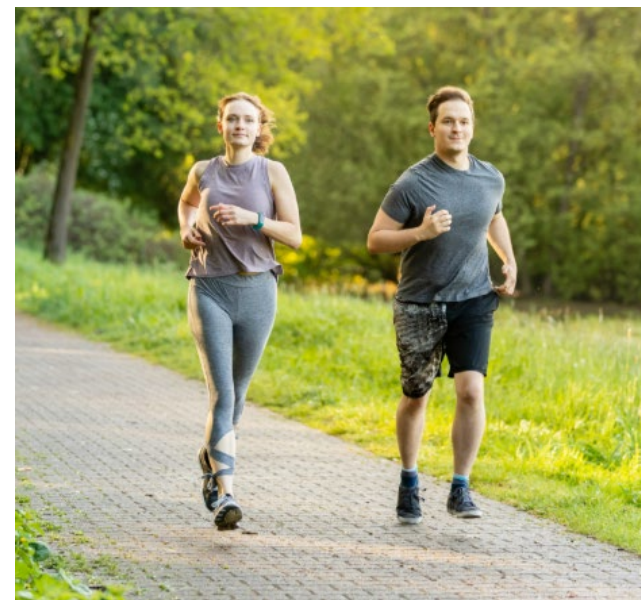
Software update

Technological validity

Contingencies exercised

Alternate Sites

Seizing "Peacetime"





Never Give Up!!!



Big Problems, Can Turn Into Big Opportunities



Thanks!!



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