



CYLANCE™

**TRUST AND THE
ECONOMICS OF
INSECURITY**

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Computing Done Right. The POWER to Change a Life.



TRUST

Competence

Capability
Results

Character

Intent
Integrity

“Accept it...they are going to get in.”

CISO Panel – ISSA Los Angeles, May 2017

RSA

THE
MOMENT
YOU LINK

BUSINESS
RISK

TO A
SECURITY
INCIDENT

THAT'S
BUSINESS-
DRIVEN
SECURITY™

Join
us tomorrow
for the Keynote
at 8:00 AM



RSAConference2018
San Francisco | April 16 - 20 | Moscone Center



1%
improvements
everywhere

Rohit Ghia

“1% improvements everywhere”

“Get a little bit better everyday”

“If a vulnerability has been exploited in the wild ... lets patch it”



**MONKEYS AND
MALWARE:**

**WHAT DO
THEY HAVE
IN COMMON?**



HABITS



We first make our habits then our habits make us ...

Are CISO's habituated to compromise so therefore accept it ?

THE FAMOUS SOCIAL EXPERIMENT: 5 MONKEYS AND A LADDER

- Five monkeys in a cage, and in the middle, a ladder with bananas on top.
- Every time a monkey went up the ladder, the scientists soaked the rest of the monkeys with cold water.
- After a while, every time a monkey would start up the ladder, the others would pull it down and beat it up.
- After a time, no monkey would dare try climbing the ladder, no matter how great the temptation.



INCREMENTAL CHANGE



Step by step or variations in degree along an established conceptual continuum or system framework

It is based on precedent and intended to do more of the same but better

TRANSFORMATIONAL CHANGE



Variation in kind that involves reconceptualization and discontinuity from the initial system

Evokes resistance from two sources: fear of separation and fear of failure in attempting a creative leap

TODAY'S REALITY

ISSA Thru the Eyes of Cyber Professionals – Part 2

- ½ significantly vulnerable
- ½ somewhat vulnerable

100% Vulnerable

World Economic Forum Risk Report - Feb 2017 / 2018

- Income/Wealth Disparity
- Climate Change
- Polarization of Societies
- Cyber – 2018 it's the #1 Biz Risk
- Aging Population



TODAY'S REALITY – CONT.

Edelman Trust Report – Feb 2017/2018

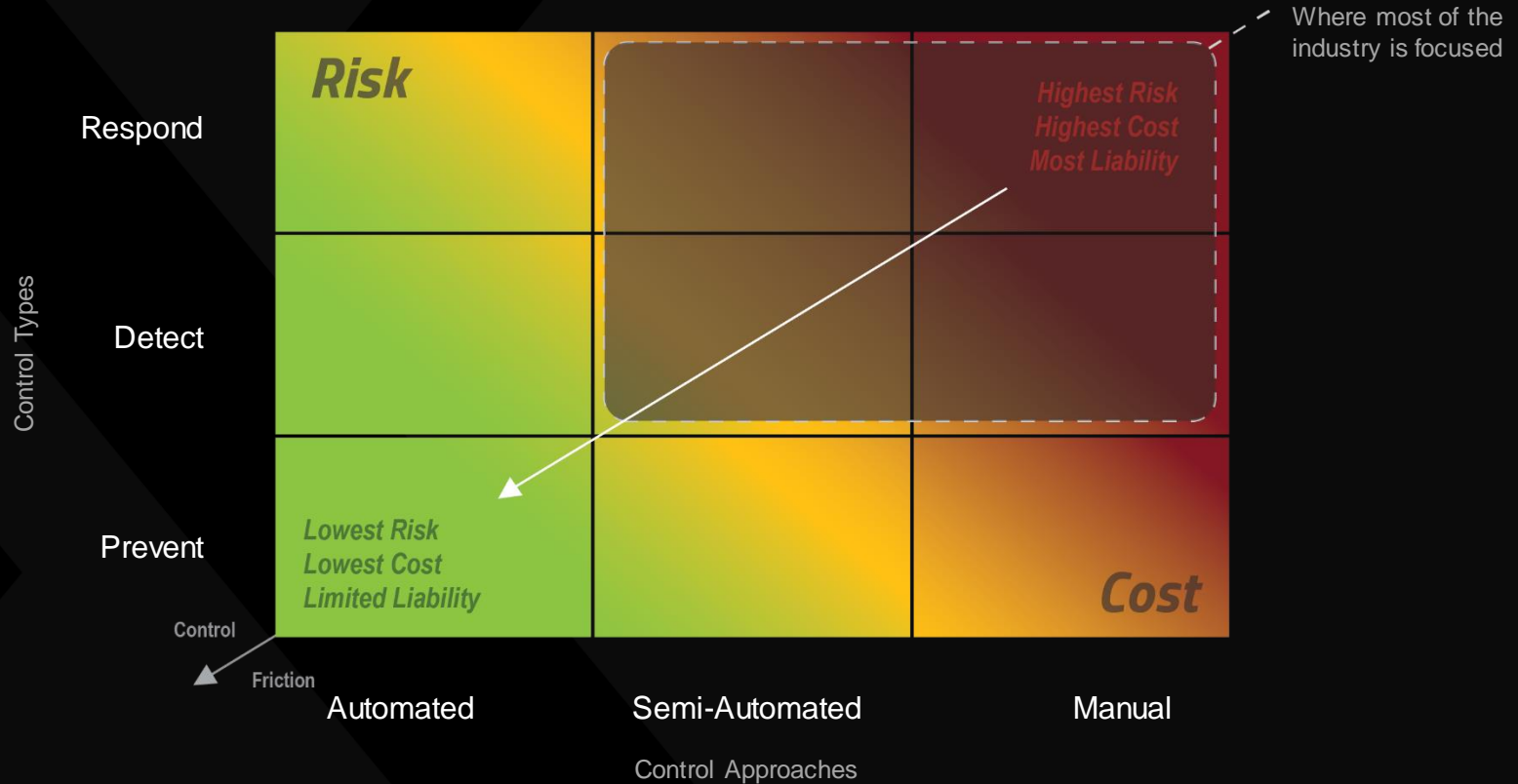
- Implosion of Trust – 2/3 distrusters
- We are in treacherous seas without a firm mooring

Europol - Internet Crime Report – Oct 2016/2017

- Acceleration of previous trends
- APT & cybercrime boundaries blur
- Majority of attacks are neither sophisticated or advanced



9 BOX OF CONTROLS: RISK MITIGATION



TODAY'S REALITY



Information security is an economic inefficiency.

WHAT IS ECONOMIC EFFICIENCY?

Economic efficiency implies an economic state in which every resource is optimally allocated to serve each individual or entity in the best way while minimizing waste and inefficiency.

The ideal state is related to the welfare of the population as a whole with peak efficiency also resulting in the highest level of welfare possible based on the resources available.



TODAY'S REALITY

Our approach to information security is the cause of economic inefficiency.



TODAY'S CISO REALITY



**Transformational change is impeded by subtle mind traps
which maintain behavior in habitual patterns**

TEMPORAL ADVANTAGE

To put it simply: threat actors have had a *temporal advantage* over us. We have been playing catch-up for decades.

TODAY'S REALITY

74.1% correlation between
breach activity and security
industry revenue growth.*

*Piper Jaffray, Breacher Report – 10.16



TODAYS REALITY WANNACRY MAY '17

- Cybersecurity stocks boom after ransomware attack
- The market capitalizations of the five biggest cybersecurity related companies in the industry rose by more than \$5.9 billion*

* The Gaurdian and Fortune – May 2017



THE STATE OF US COMPETITIVENESS*

- America's economic performance peaked in the late 1990s
- America's **economic challenges are structural**, not cyclical
- Divisive political rhetoric and an **uninformed national debate** have **confused the average American** about what the country needs to do to restore the economy
- This confusion is a serious obstacle to America's ability to make progress

* Harvard Business School – Sept 2016



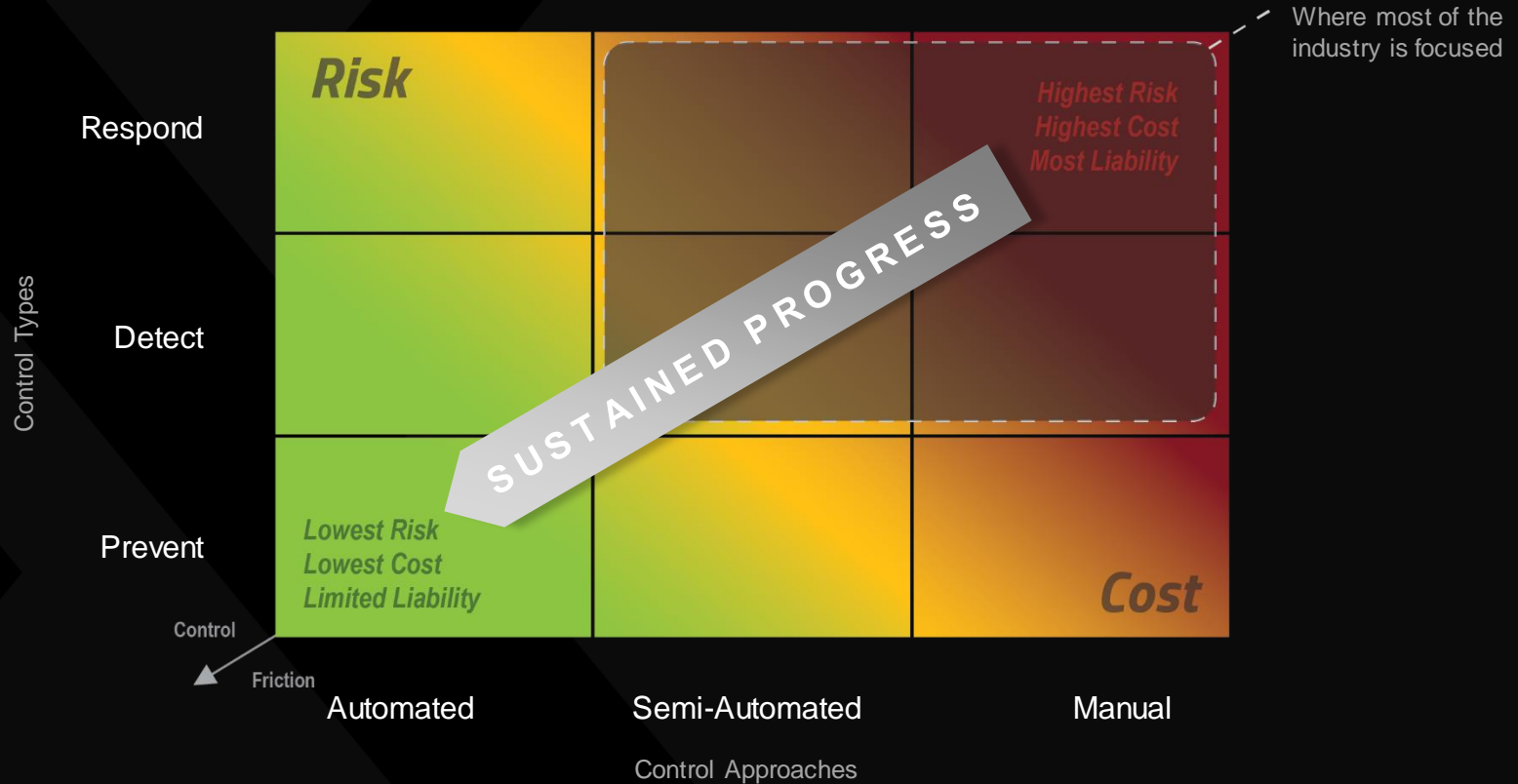
THE STATE OF US COMPETITIVENESS*

- There is almost a **complete disconnect** between the national discourse and **the reality of what is causing our problems and what to do about them**
- This **misunderstanding of facts and reality is dangerous**, and the resulting divisions make an already challenging agenda for America even more daunting

* Harvard Business School – Sept 2016



ACHIEVING ECONOMIC EFFICIENCY



**GOT CUCUMBER, WHEN YOU SHOULD HAVE
GOTTEN GRAPES?**



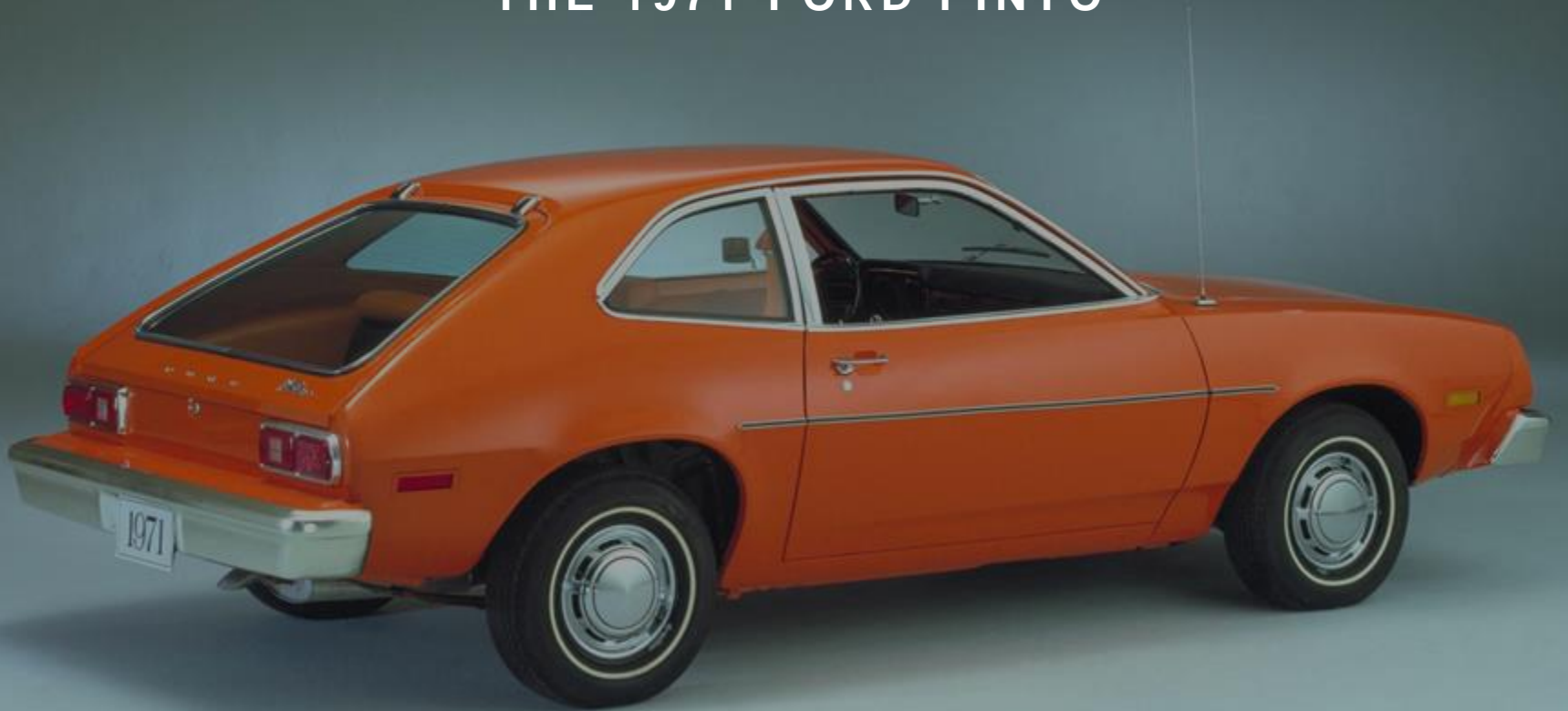
HOW DO YOU FRAME THE RISK DISCUSSION?

BUSINESS VELOCITY

----- VS -----

BUSINESS CONTROL

THE 1971 FORD PINTO



FAILURE TO INCLUDE AN \$11 PART

1911 SOUTH POLE EXPEDITION



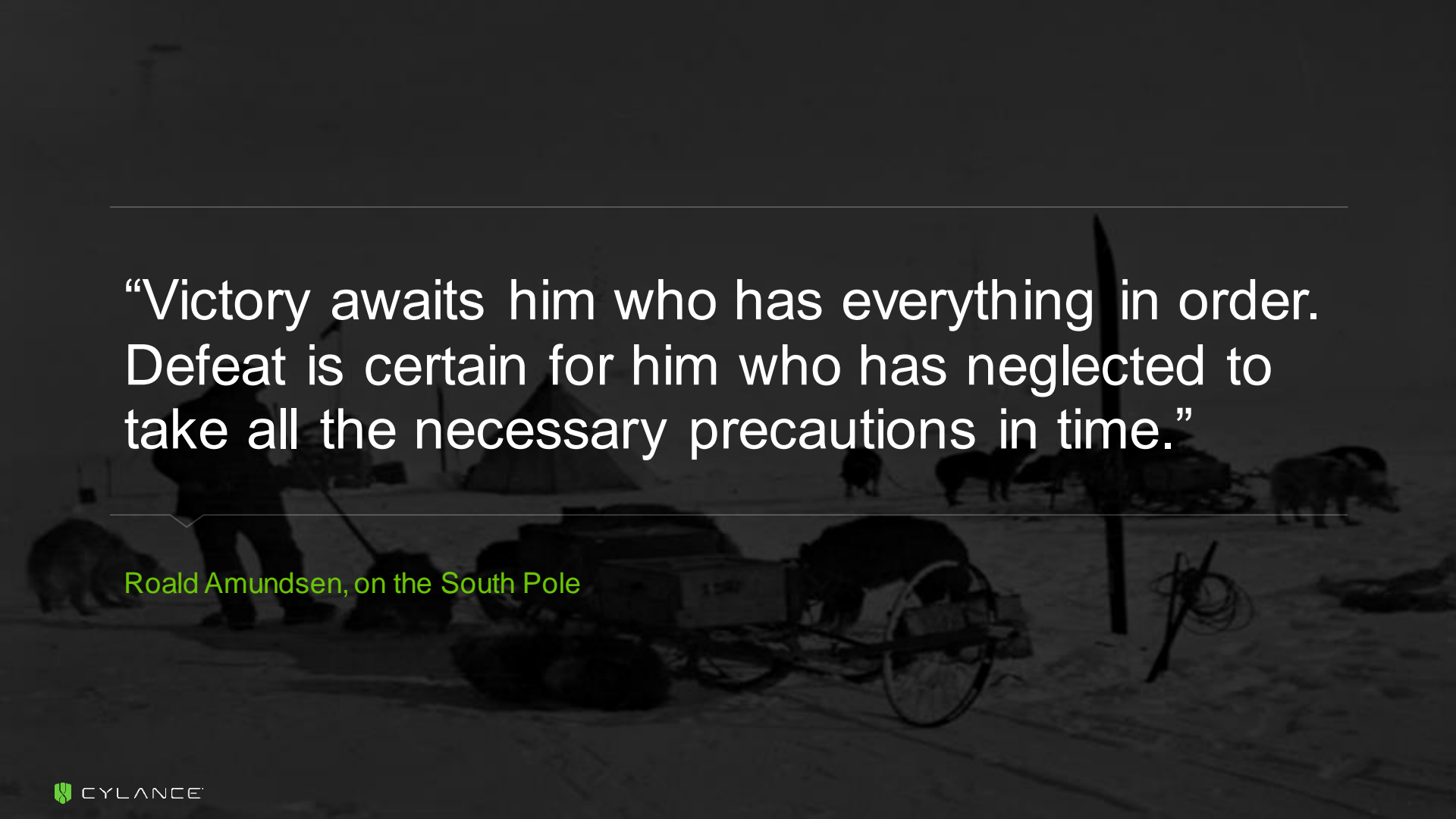
“...wait for the spring. To risk men and animals by continuing stubbornly once we have set off, is something I couldn't consider. If we are to win the game, the pieces must be moved properly; a false move and everything could be lost.” - Roald Amundsen, Norwegian Explorer



1st to the Pole, led by Roald Amundsen



2nd to the Pole, led by Robert Scott

A dark, historical photograph of a polar expedition camp. In the foreground, a person is seen from the back, standing near a sled. Several dogs are scattered around the camp, some pulling sleds. The background shows a snowy landscape with a tent and a tall, thin pole. The overall scene is dimly lit, emphasizing the harsh and cold environment.

“Victory awaits him who has everything in order. Defeat is certain for him who has neglected to take all the necessary precautions in time.”

Roald Amundsen, on the South Pole

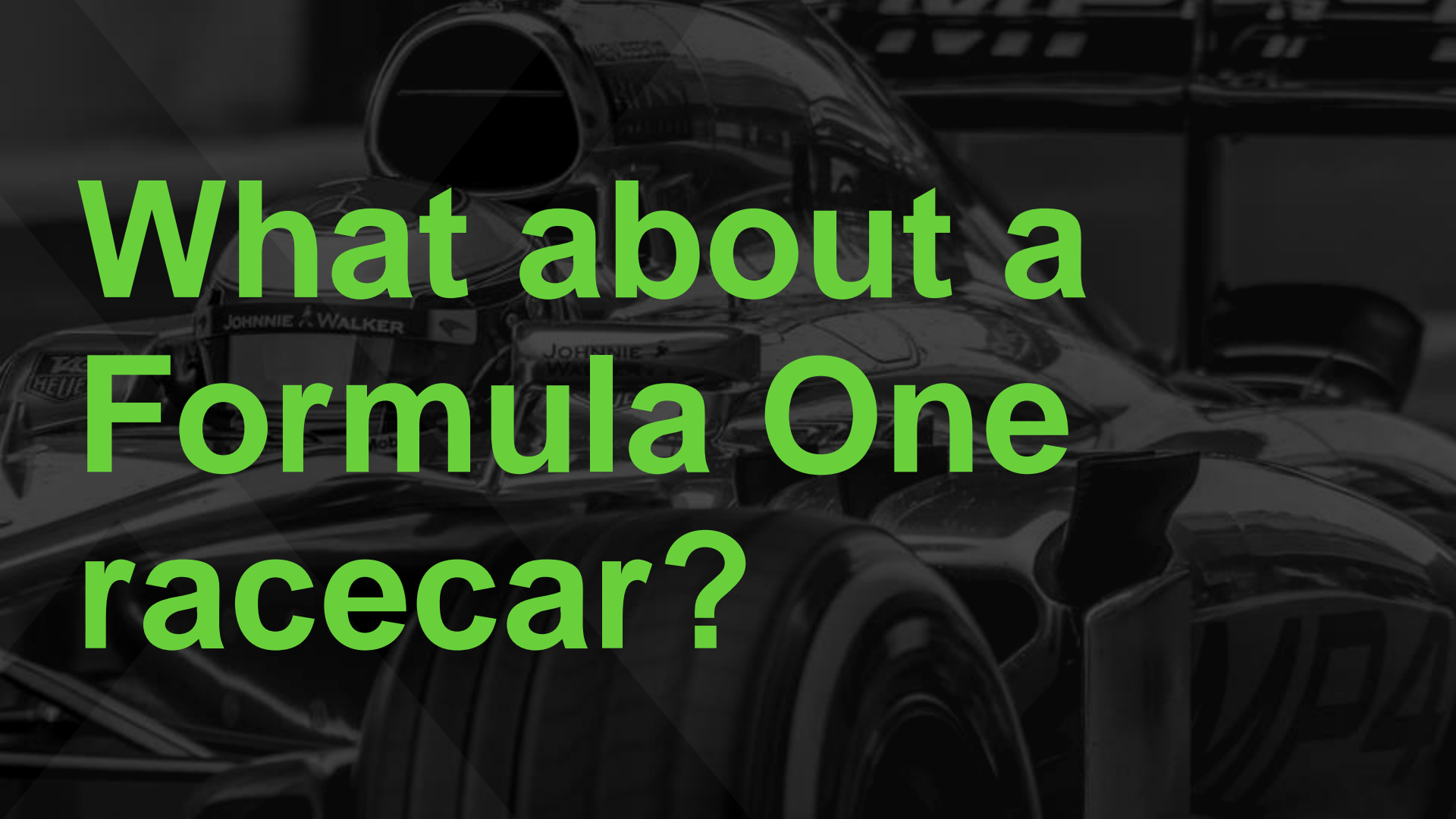


KEY LEARNINGS FROM AMUNDSEN & 10XERS:

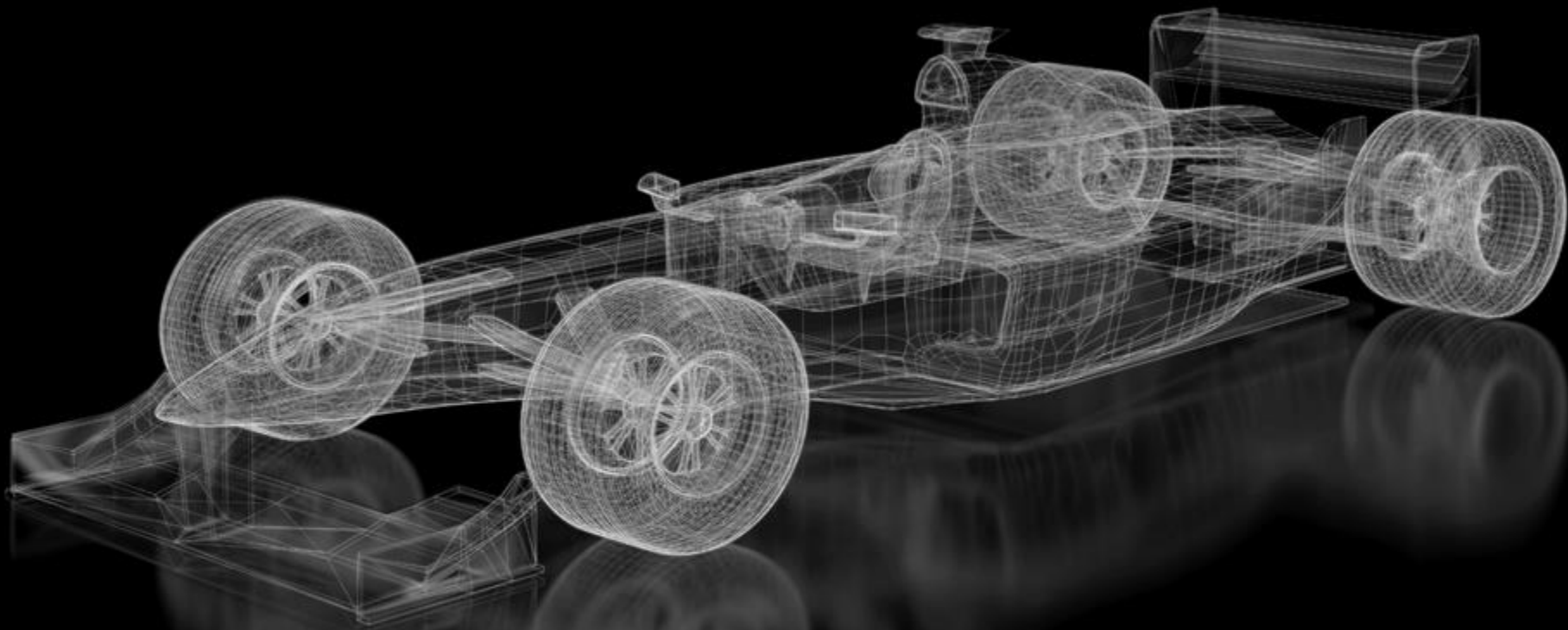
- Fanatical Discipline
- Productive Paranoia
- Empirical Creativity
- Limitless Ambition

**Different Behaviors NOT
Different Circumstances**

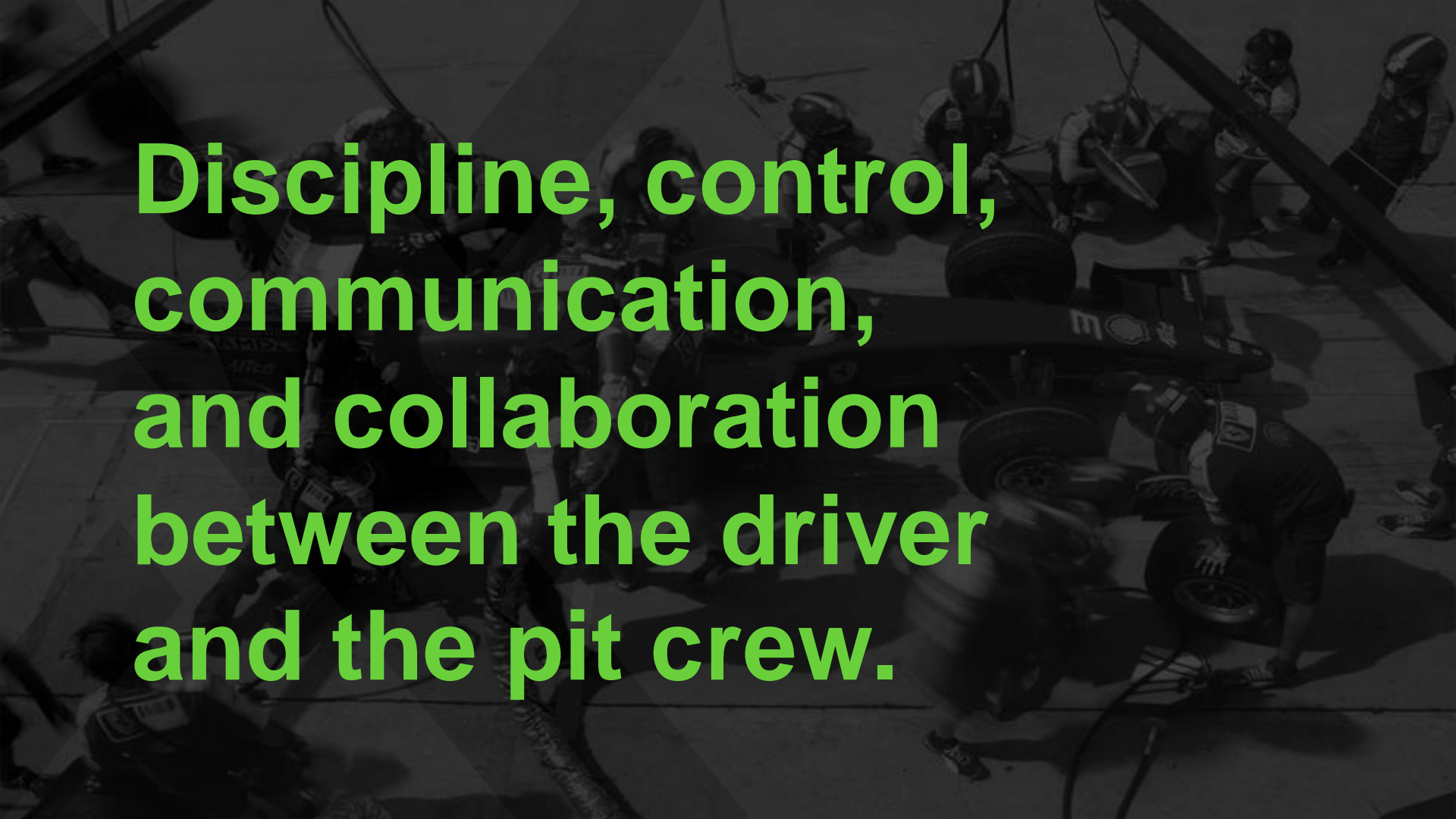
* Great by Choice

A close-up, dark, and slightly blurred image of a Formula One race car. The car is predominantly black with silver and white accents. The name 'JOHNNIE WALKER' is visible on the front wing and sidepods. The car is positioned on a track, and the background is dark and out of focus.

**What about a
Formula One
racecar?**



Designed for Speed and Safety.

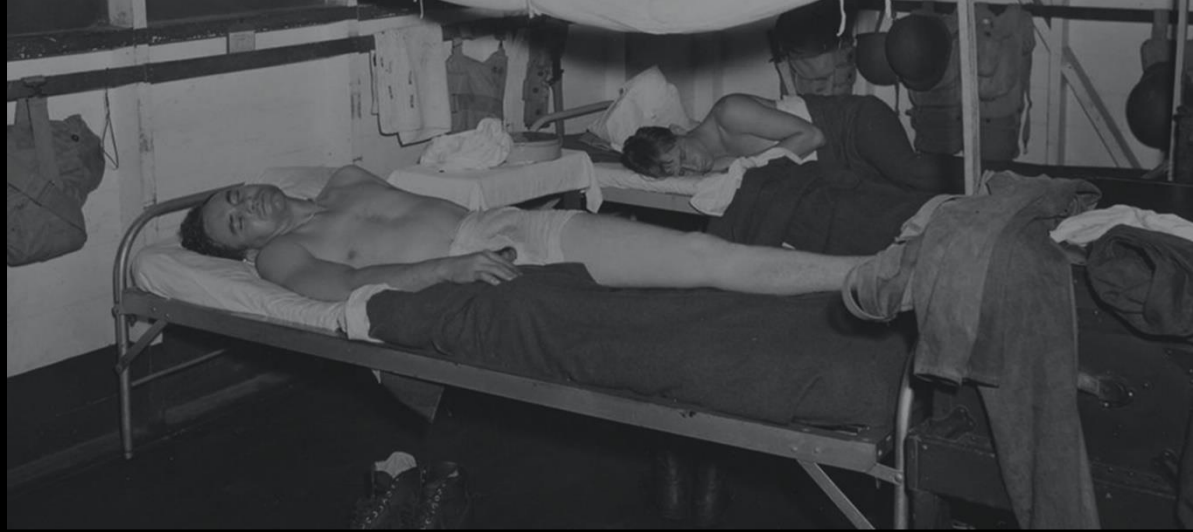


**Discipline, control,
communication,
and collaboration
between the driver
and the pit crew.**



BUSINESS VELOCITY
AND
BUSINESS CONTORL

PREVENTION & PANAMA



HOW IT BEGAN

In 1879, the French started building the Panama Canal.

Torrential rains averaging 200 inches a year washed away much of the work.

A TOXIC CONTROL

The Solution? Quinine...

...but the quinine used to treat malaria left many workers deaf.



THE TIMELINE

1903

- Panama declares itself a country. US gains construction rights.

1909

- Work on canal locks begins.

Aug 15 1914

- Canal officially opens in August.

Feb 1904

- US Congress officially created the Panama Canal Zone.

1913

- US Congress officially created the Panama Canal Zone.

A dark silhouette of a mosquito is positioned in the upper right quadrant of the slide. The mosquito's body is dark, and its long, thin legs and wings are clearly visible against the lighter background. The background of the entire slide is a dark gray with a subtle geometric pattern of overlapping diamond shapes.

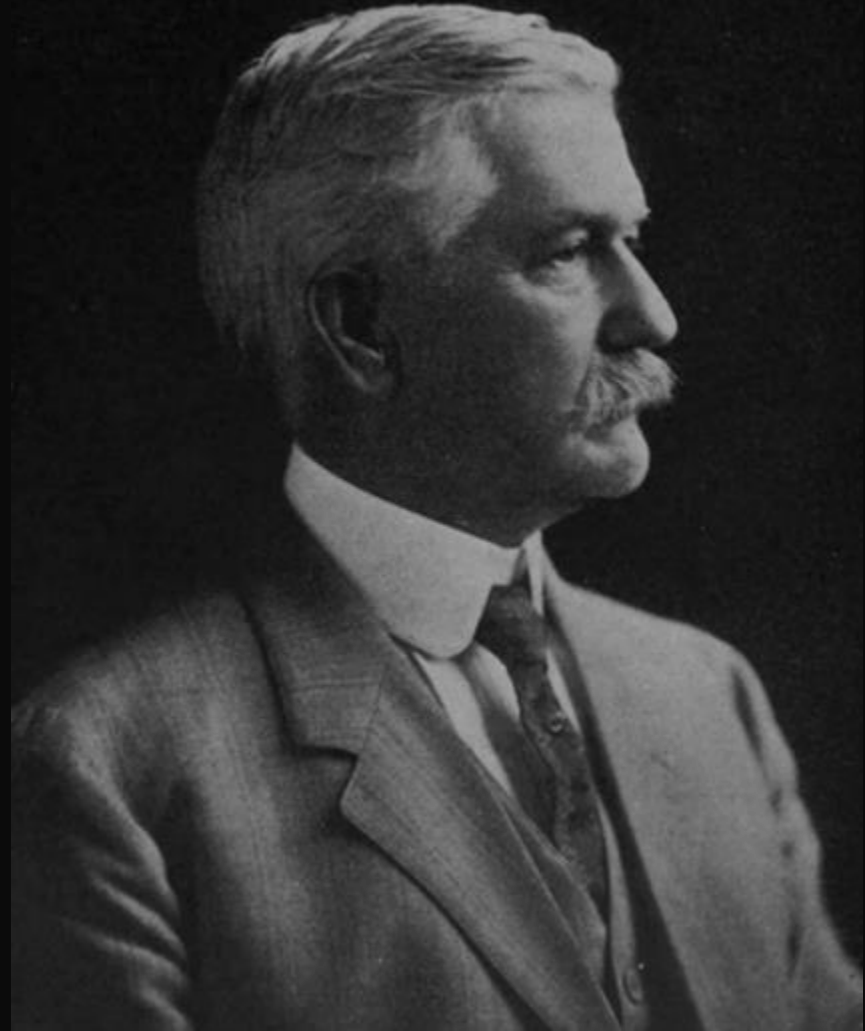
PROBLEM? SOLUTION.

Major Ronald Ross discovered that malaria was transmitted by mosquitoes.

The control of malaria was vital for the construction of the Panama Canal.

A MAN...
HIS PLAN...
AND A CANAL.

Experts on sanitation.
Col. W.C. Gorgas, along
with others in 1904, formed
the sanitary department for
the canal zone.



MALARIA CONTROL PROGRAM RESULTS

- Eradication of yellow fever
- Death rate dropped in workers from 11.59 per 1000 in November 1906 to 1.23 per 1000 in December 1909
- Death rate dropped in total population from 16.21 per 1000 in July 1906 to 2.58 per 1000 in December 1909



ECONOMIC EFFICIENCY

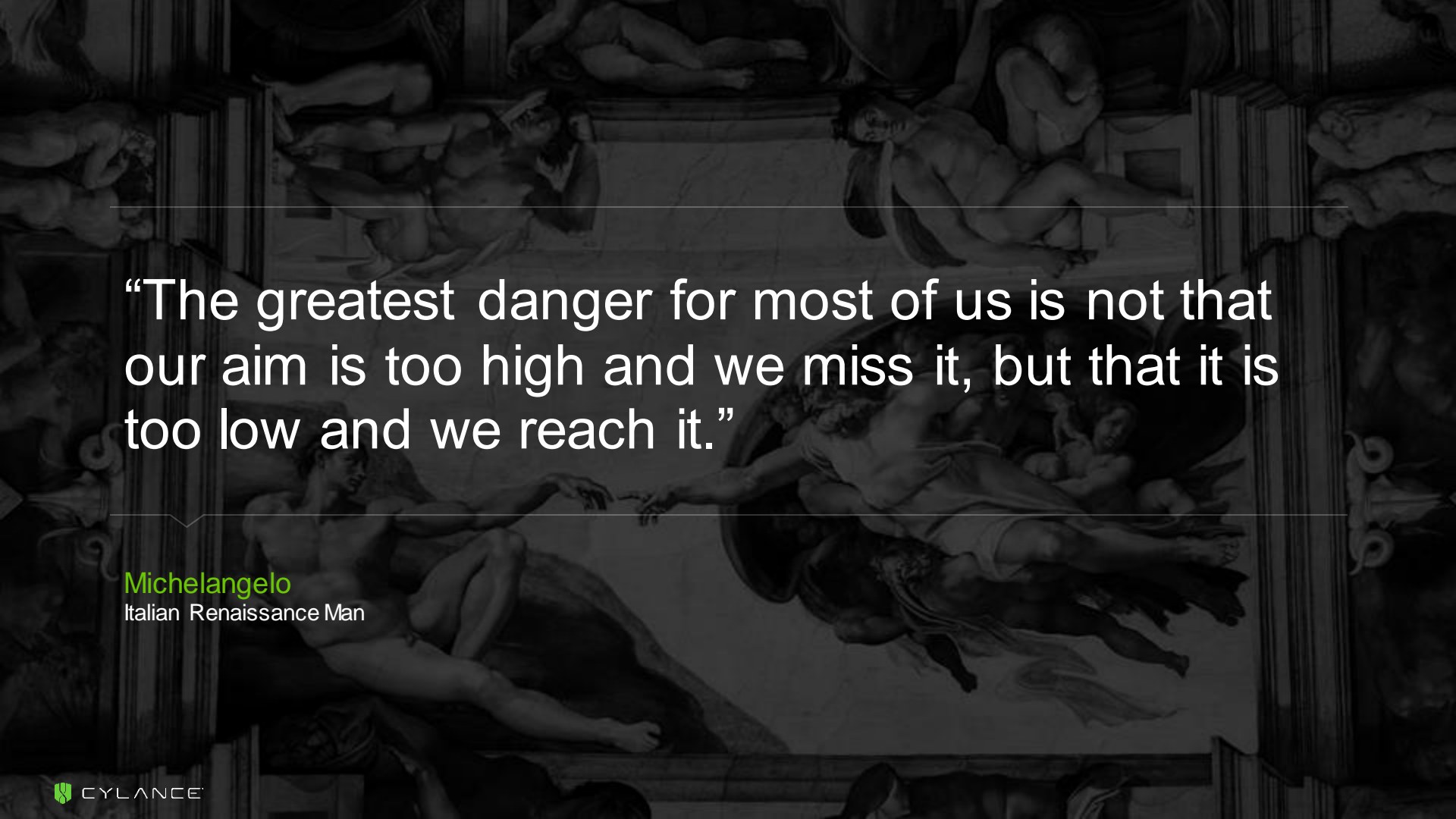
The construction of the panama canal was made possible only after yellow fever and malaria were controlled.



LESSONS FOR SECURITY

Malaria wasn't eliminated but the root causes were identified, the source of problems were prevented, and construction was completed, leading to dramatic worldwide social and economic benefit.





“The greatest danger for most of us is not that our aim is too high and we miss it, but that it is too low and we reach it.”

Michelangelo

Italian Renaissance Man

RSA

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**PRIVACY SHOULD
BE INCLUDED IN
DESIGN – NOT AS
AN AFTERTHOUGHT.**



“...where our interests are clear and our values are at stake and **we can make a difference, we must act and we must lead.**”

Madeline Albright, “Doability Doctrine”

Statement before SFRC January 8th 1997, Stockholm Sweden

“... Impossible is nothing”

“... Impossible is a dare”

Mohamed Ali

Stop accepting the
status quo of being
habituated to
compromise

Demand grapes
not cucumbers



THANK YOU