



هيئة الإمارات للمواصفات والمقاييس
Emirates Authority For Standardization & Metrology



United Arab Emirates

Role of Accreditation

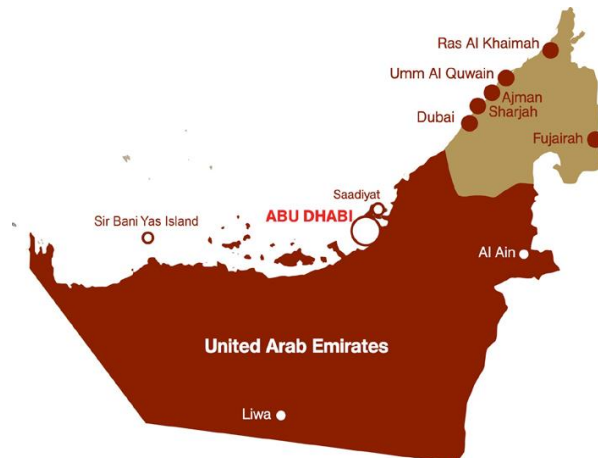
“Improving Inspection Body Outcomes”

Federal Authority | هيئة اتحادية

Dr. Rehab Al Ameri – Director of National Accreditation Department



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1st Country empowering private enterprise & sectors through government, *Based on international competitive statistical index 2017.*

2nd Safest country in the world, *Announced in Economic Forum 2016.*



Flow of the topic

- Facts about UAE
- UAE Paradigm shift in Economy ideology.
- National Quality Infrastructure.
- National Accreditation Department & ENAS (WHO WE ARE?)
- Cost of poor Quality from IB activities.
- Why accreditation is important for IB.
- Role of ENAS in enhancing quality outcomes for IB



Facts about United Arab Emirates

- UAE composed of seven emirates with total population **9.45** million in 2018 according to World Bank, with more than 85% expats in which 59.48% comes from South Asia countries.
- Abu Dhabi is the capital of UAE and it is the largest, in which accounts for approximately of **87%** of the total land area of the country and accommodate the largest population.





Facts about United Arab Emirates

- What build UAE nation is **Education** and openness to all other cultures, while the oil (**BLACK GOLD**) only was a tool to facilitate the way for knowledge.
- In 1976, the United Arab Emirates University was established and considered by the government to be the leading teaching & research institution in the country.

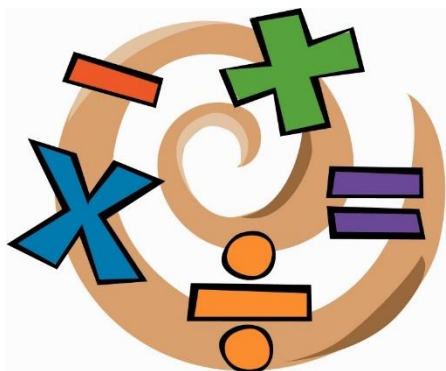


Ethnic Group representing UAE Population

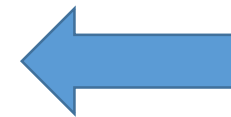




Shifting the Equation



- ✓ More than 70% of Country Incomes was depending on Oil and related industries
- ✓ 70% economy shall be from non Oil industry by 2030
- ✓ By **2050** celebrating last Oil Barrel.



The message!

Empowering and engaging Privet Sector, foster Innovation and ensure Delivering of excellence services to all.



UAE Mars 2117
Hope Spacecraft

Fujairah Plan

UAE Water Security
Strategy 2036

Abu Dhabi Economic 2030 vision
Abu Dhabi 2030 Plan

Sharjah Tourism Vision

National Innovation
Strategy

1st Nuclear Reactor

Expo 2020

UAE Digital strategy
"Block chain 2018"

2117 - 2050

2040 - 2031

2030

2021

2020 - 2018

UAE Centurial 2071

UAE Advance Science
Agenda

UAE A.I Strategy

Dubai 2030 Industrial Strategy

Sustainability Development
Goals

Dubai Plan2021

Dubai Healthcare Plan

Paperless Government

Dubai Tourism Vision

Education Strategy





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United Arab Emirates

From Vision to Measures

Cascaded in to Initiatives-Programs-Projects



خطة دبي
2021
DUBAI PLAN



5
Sectors

25
Goals

83
Programs



4 Visions, 7 Sectors, 6 Agenda items

- **United in Responsibility**
 - Cohesive Society and Preserved Identity
- **United in Destiny**
 - Safe Public and Fair Judiciary
- **United in Knowledge**
 - Competitive Knowledge Economy
- **United in Prosperity**
 - First-Rate Education System
 - World-Class Healthcare
 - Sustainable Environment and Infrastructure

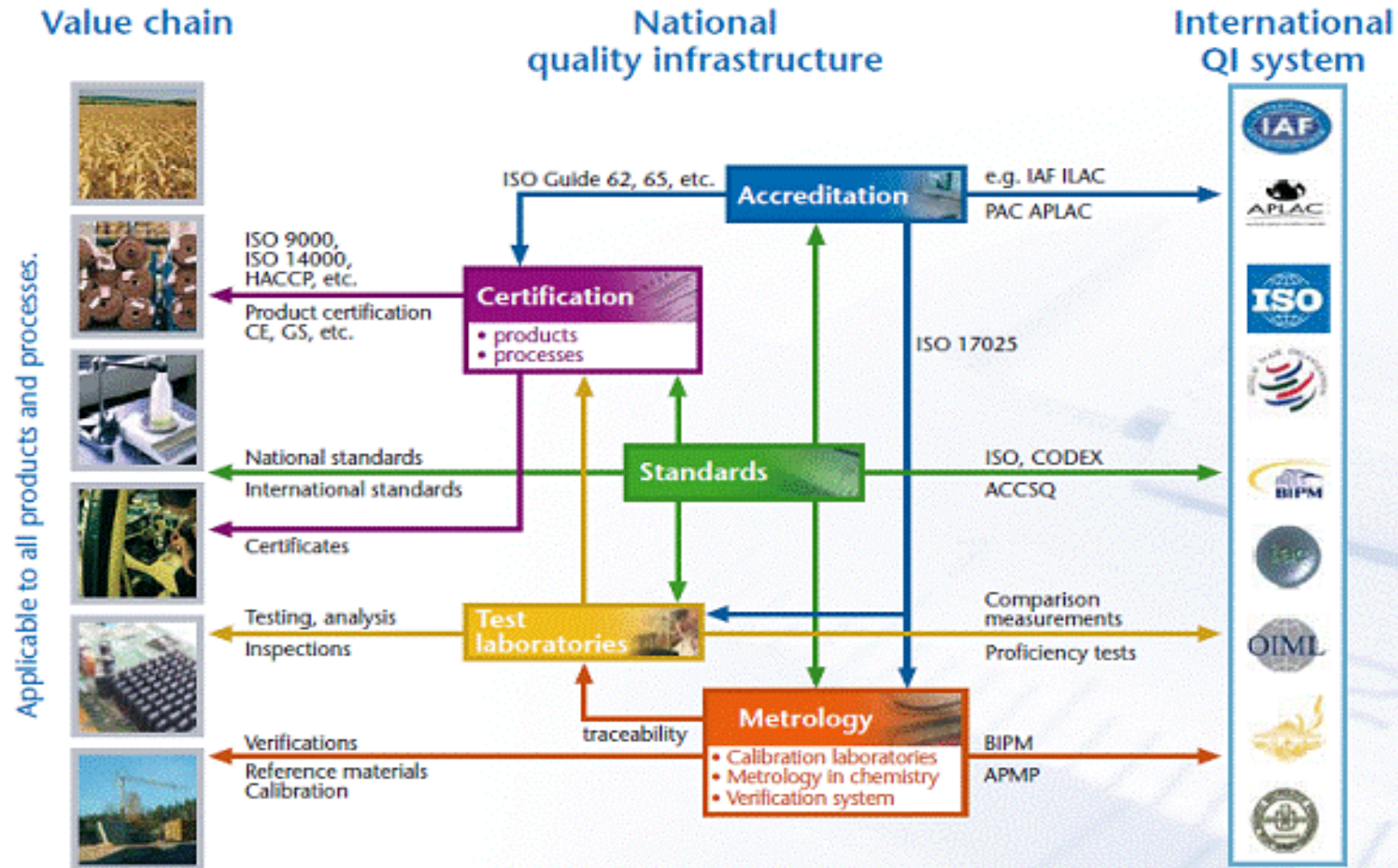


Diagram: Survey of the national quality infrastructure



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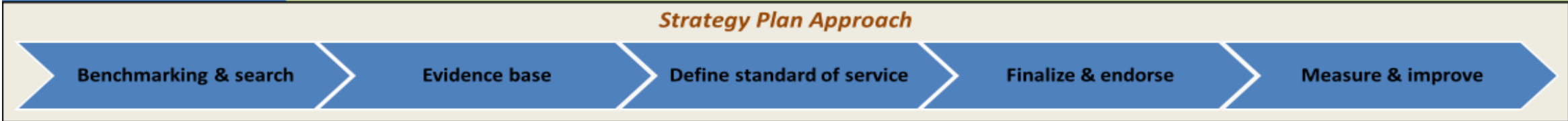
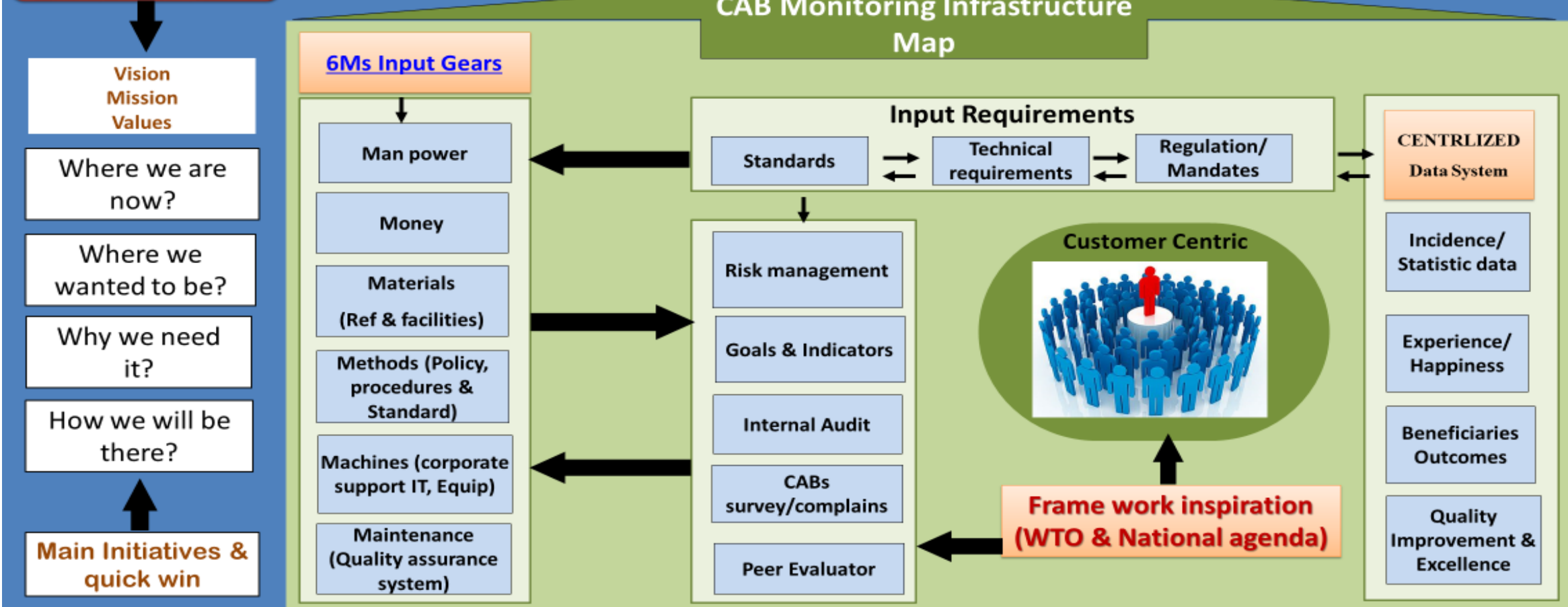
ESMA

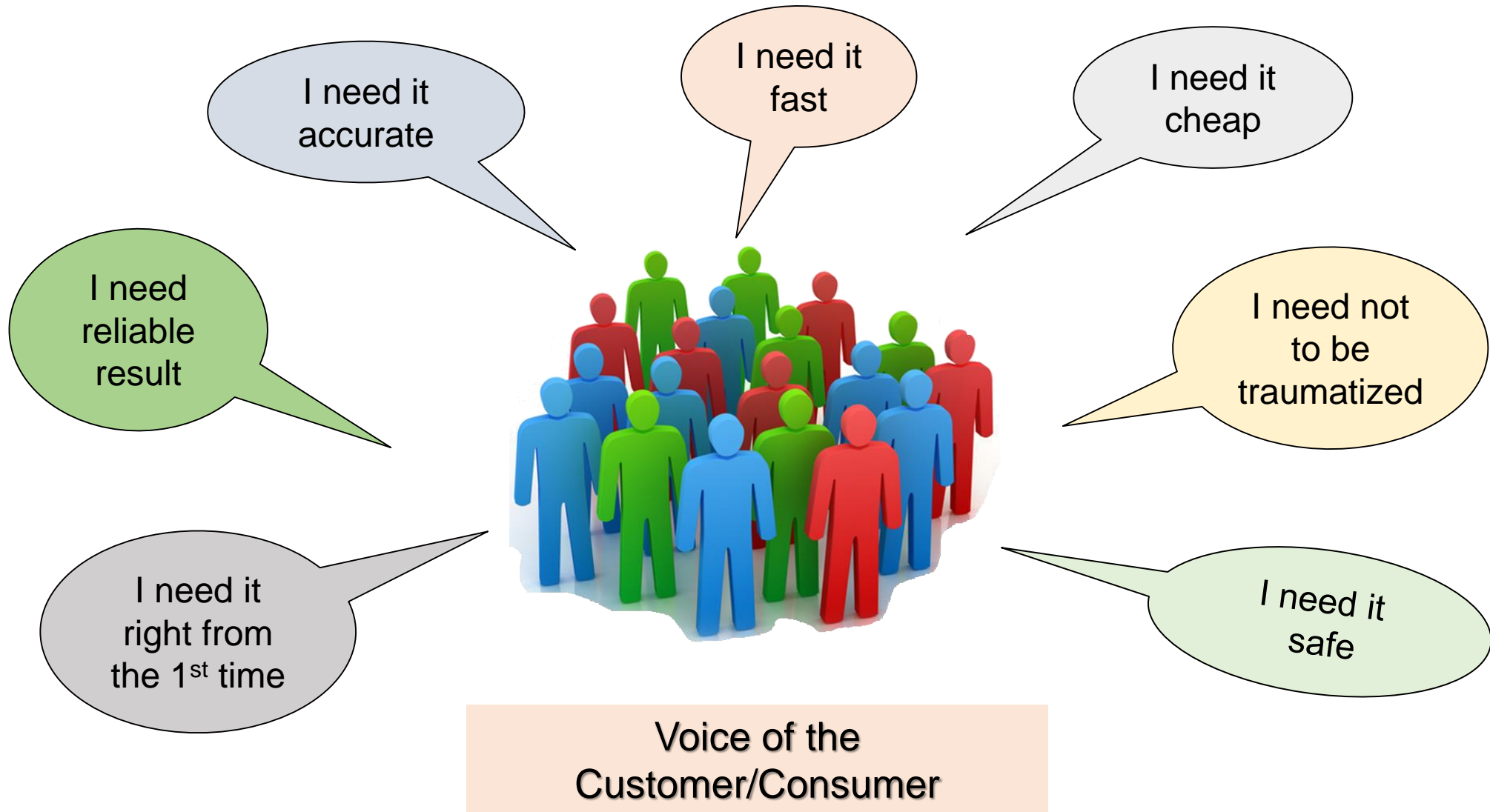


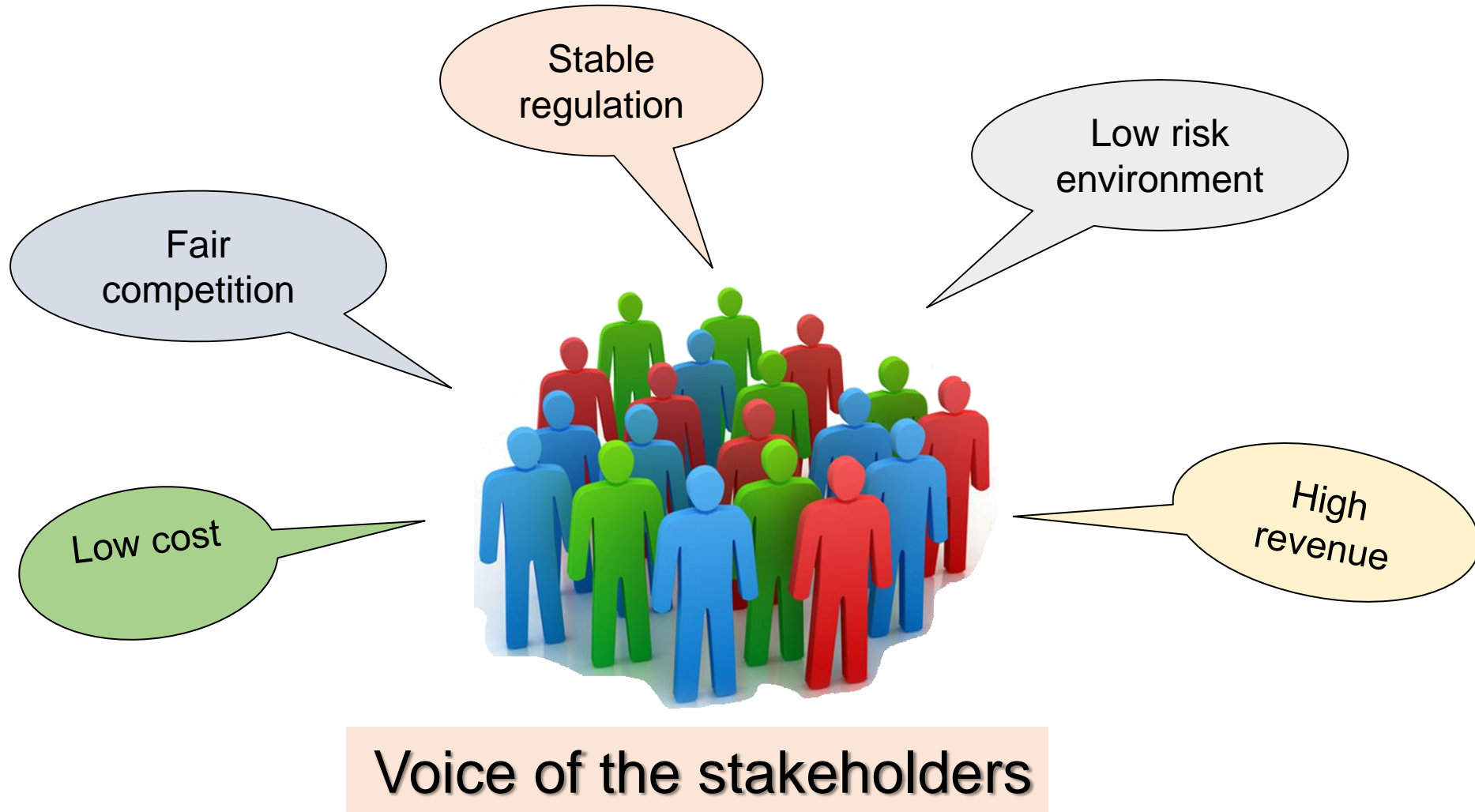


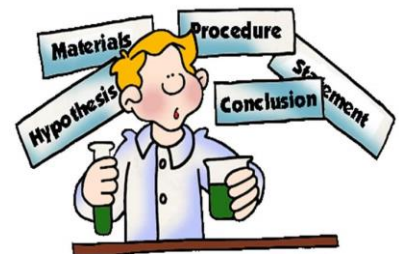
ESMA

- Emirates Authority for Standardization and Metrology (**ESMA**) was established as the sole Standardization Body in the UAE under the Law No. 28/2001.
- ESMA's board is comprising representatives of the main parties involved in the standardization of the UAE and other stakeholder beneficiaries.
- The Board of Directors is chaired by **H.E. Eng. Sultan Bin Saeed Al Mansouri, UAE Minister of Economy.**









Const
Testing



Med
Testing



Inspection
& Cert



Food
Testing





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United Arab Emirates

National Accreditation Department Managing ENAS



هيئة اتحادية | Federal Authority



The National Accreditation Department

- **ENAS** was established in 2004, based on federal law No. (28) for the year 2001 and the Cabinet Decision No. (22) for the year 2004.
- The National Accreditation Department is authorized to manages ENAS according to the Cabinet Decision No. (4) for the year 2017 and is responsible for the implementation of the Cabinet Decision Cabinet Decision No (35) for the year 2015 regarding the UAE System for the Control of Conformity Assessment Bodies based on the .

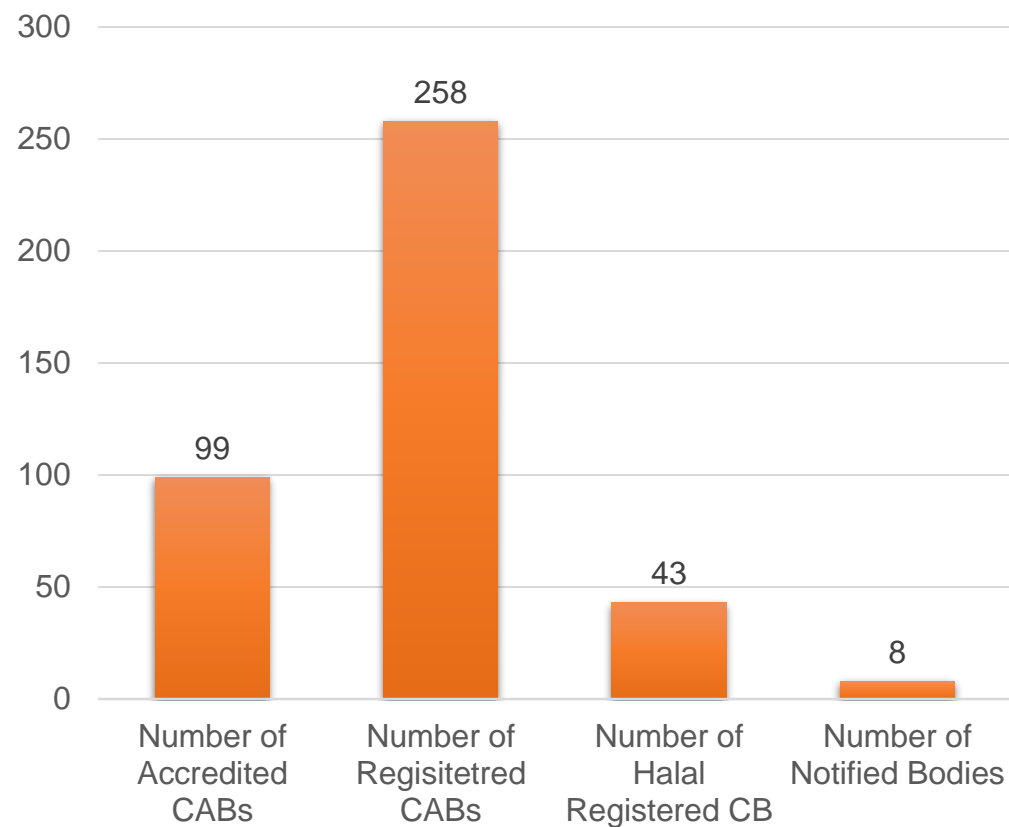


National Accreditation Department Services

Registration Services

Accreditation Services

Notification Services





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ENAS membership & participation Regional and International Level

Membership:

- 1- Full Member of Arab Accreditation Cooperation (ARAC).
- 2- Full Member of Asia Pacific Laboratory Accreditation Cooperation (APLAC).
- 3- Full Member of International Halal Accreditation Forum (IHAF).
- 4- Associate Member in International Laboratory Accreditation Cooperation (ILAC).

Participation:

- 1- Board of Director Member in GCC accreditation Center (GAC).
- 2- Board of Director of SMIIC accreditation council.
- 3- Board of Director of IHAF chaired by ENAS.

Committees:

- 1- Executive MLA, Technical Committee, MMC Committees of ARAC.
- 2- ENAS Director is Vice Chair in Technical Advisory Committee of GAC.
- 3- Executive MLA, Technical Committee, MMC Committees, Sharia Advisory Committee of IHAF.
- 4- Joint higher committee with QCC.





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**Election of UAE as Board of Director
of SMIIIC accreditation council,
SMIIIC 2018-2020**



**SMIIIC
AC
Meeting
, Feb
2018 -
Turkey**

**SMIIIC
AC
Meeting,
June
2018 -
Turkey**





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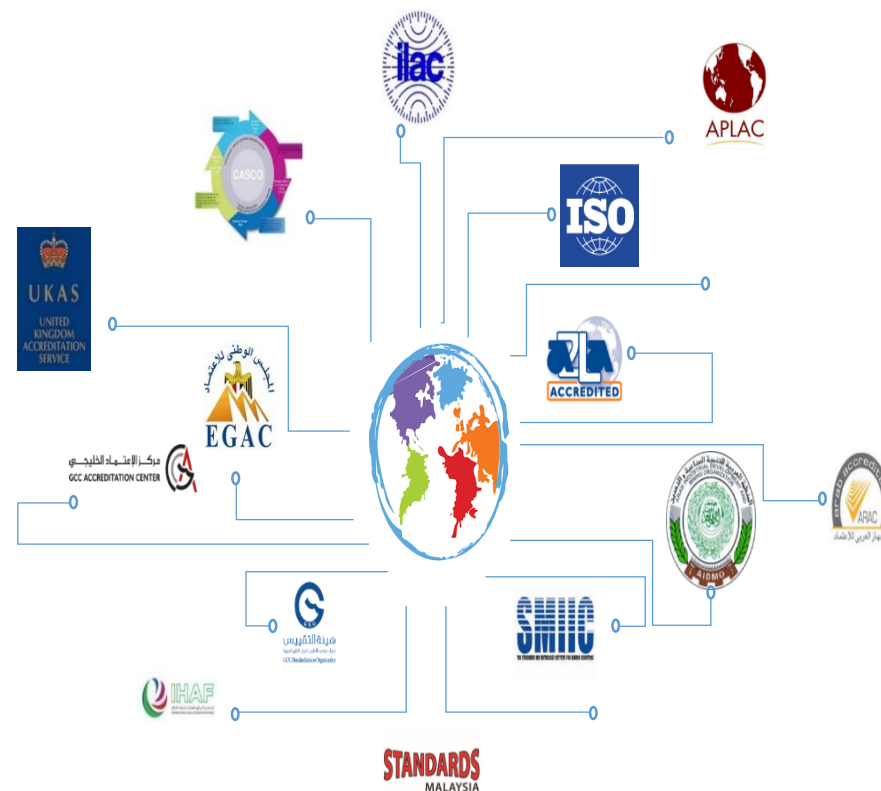
ENAS membership & participation Regional and International Level

The UAE National Accreditation System (ENAS) also signed a number of agreements and memorandums of Understanding with internationally recognized accreditation bodies to cooperate in the field of accreditation services:

- 1- Gulf Accreditation Center (GAC).
- 2- United Kingdom Accreditation Services (UKAS).
- 3- Belarusian State Centre for Accreditation (BSCA).

In process to sign with :

- 1- American National Standards Institute (ANSI).
- 2- Egyptian Accreditation Council (EGAC).





ENAS membership & participation Regional and International Level



Signing MOU ceremony with Belarusian State Centre for Accreditation (BSCA)
12-07-2018



Signing MOU ceremony with United Kingdom Accreditation Services (UKAS)
30-04-2018



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ENAS National participation and Collaboration



Cooperation to support and
accredit FANR radiation
calibration lab.



Cooperation with Swedish Government in
supporting medical laboratory
accreditation requirement & IFS
Swedish Ambassador and DG of ESMA,
during Arab Health 2018



Participation in Gulf Food Exhibition,
Feb 2018



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Initiative “TAWASUL with ENAS”





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Stakeholder Engagement, Al Ain Municipality



Stakeholder Engagement, Abu Dhabi QCC



Interactive Session with Stakeholders



Strategic Partner Involvement – Police Department



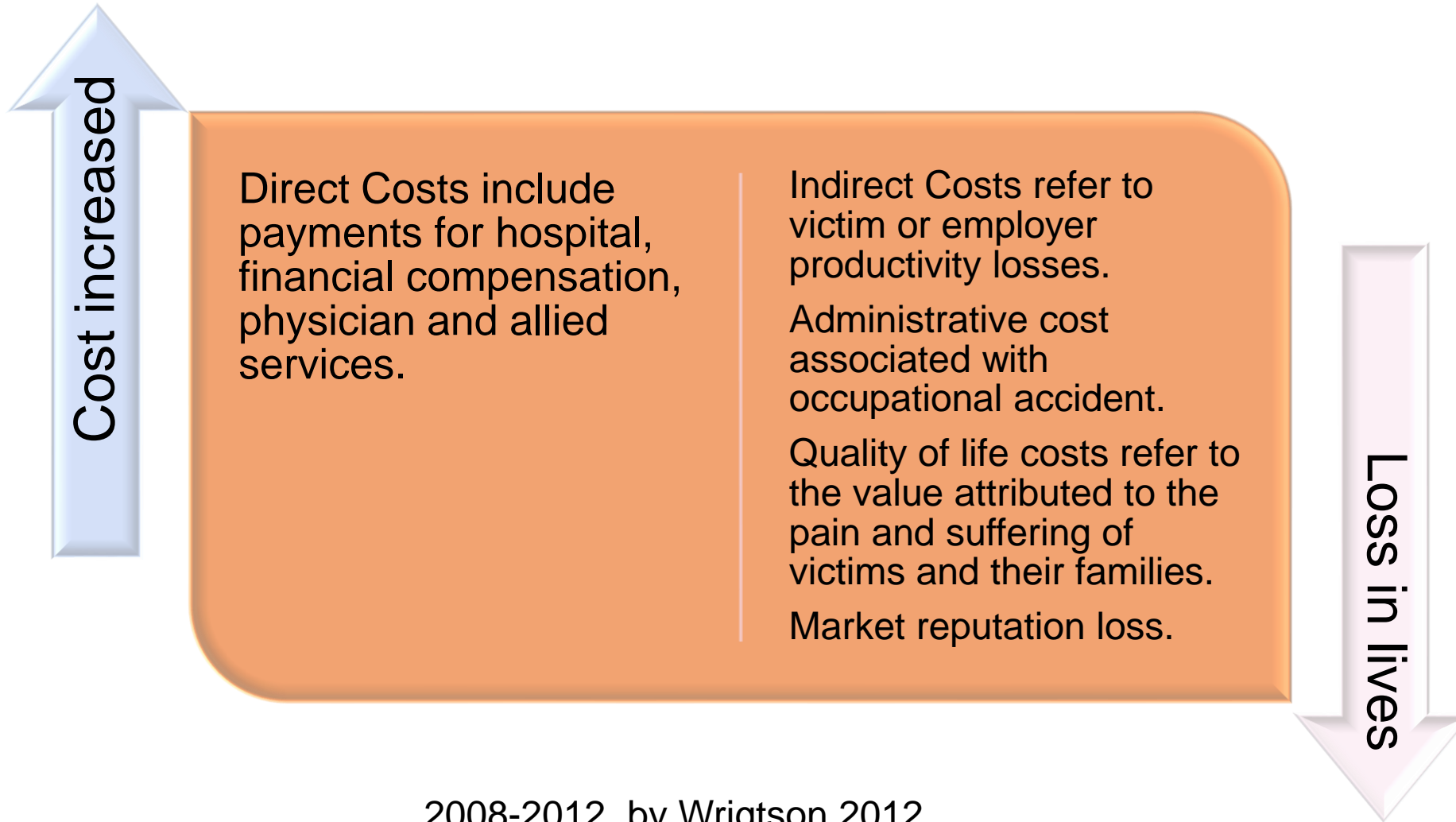
Cost & fatality by faulty lifting equipment





- In 2009, the economic cost of injuries and illness in Australia (construction sector related injuries) AUD6.4 billion = 23.2% of operating profit (*Safe Work Australia, 2012*).
- The total cost for Washington DC, from crane-related deaths and injuries for the three years (2008-2010) was US\$ 762 million. (*Wrightson, 2012*).



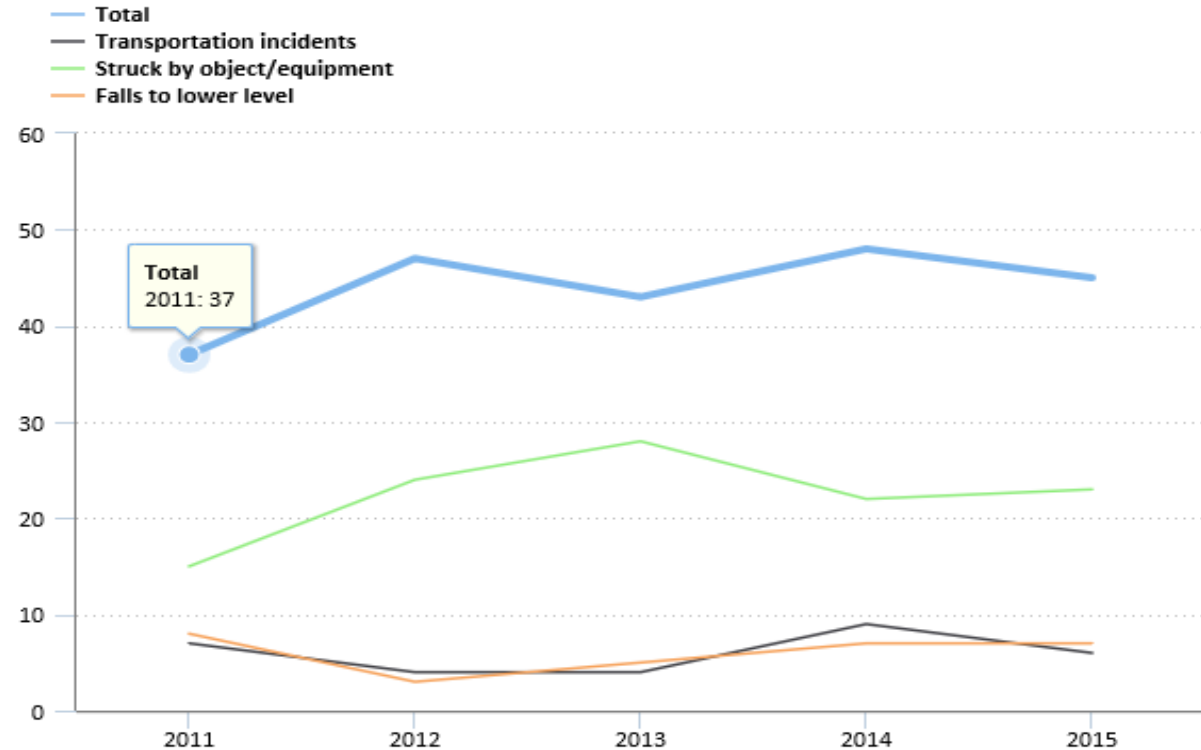


2008-2012, by Wrigtson 2012



(2011- 2015), the Census of Fatal Occupational Injuries (CFOI) reported 220 total crane-related deaths, an average of 44/year. Human error related cause accounted for 217 of the 220 fatal injuries involving cranes.

Fatal occupational injuries involving cranes by type of event, 2011–15



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics.





Common causes of fatalities

- Smoking related cause of death for more than 3000 people in the UAE in 2016 and cost UAE \$569 million in lost productivity and health care costs, according to the latest report on global smoking.
- A tobacco tax regulation in late in 2017 has been welcomed as an indicator of positive action to reduce the amount of people smoking in the UAE.
- The UAE scores highly on the WHO Cessation Index a measure of state initiatives designed to help people quit smoking.





Reported from WHO 2015



Every year, **food poisoning** causes:

600,000,000
illnesses

420,000
deaths

125,000
deaths among
children under 5

These **diarrheal diseases** are the
top causes of deaths and illnesses:

Norovirus

Campylobacter

Salmonella

E. coli

SOURCE: World Health Organization

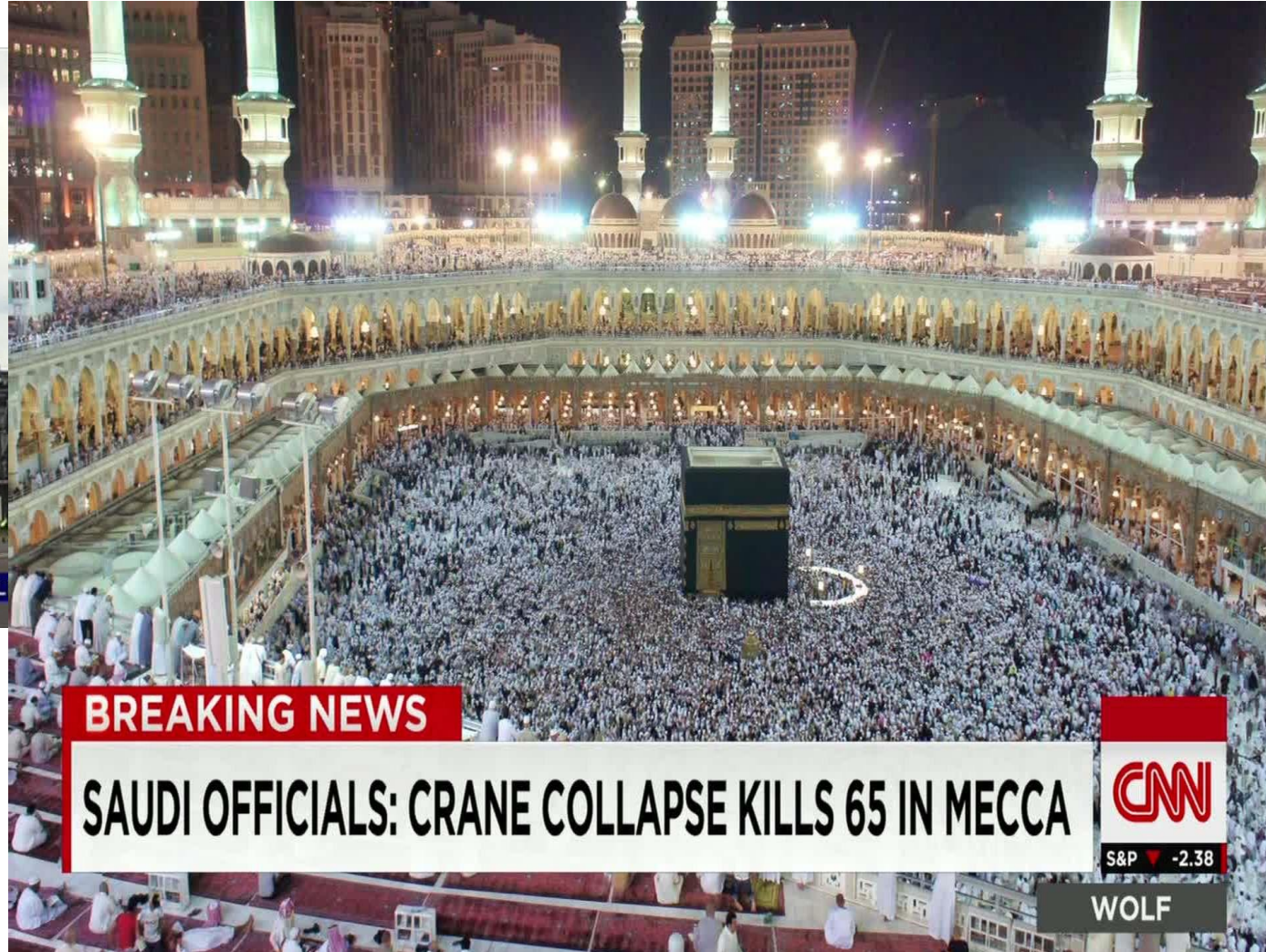
TECH INSIDER

In every 3 second , one person is
dyeing across the world





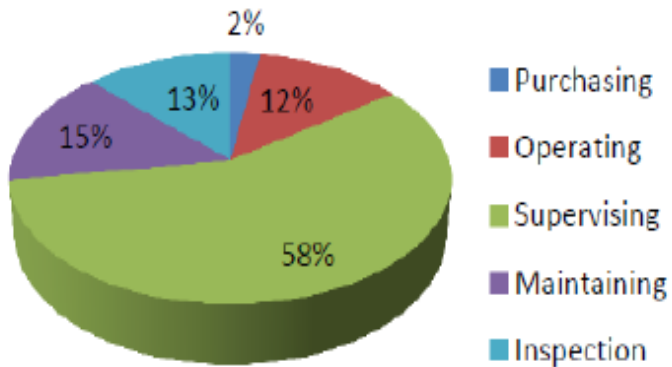
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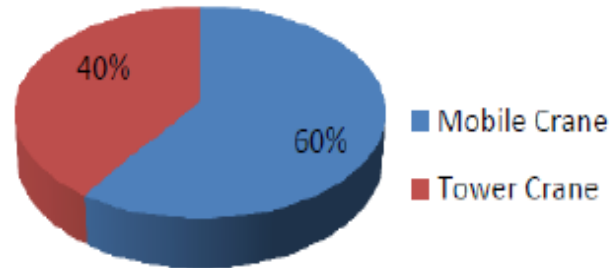


Construction industry in an Economic engine

Type of Involvement in Managing Cranes



Type of Crane Involved Before



Crane Failure and Accident in Construction

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^{a*}kamarulutn@gmail.com, ^bmibrahim@utm.my

Keywords: Construction management, cranes failures, occupational accidents.

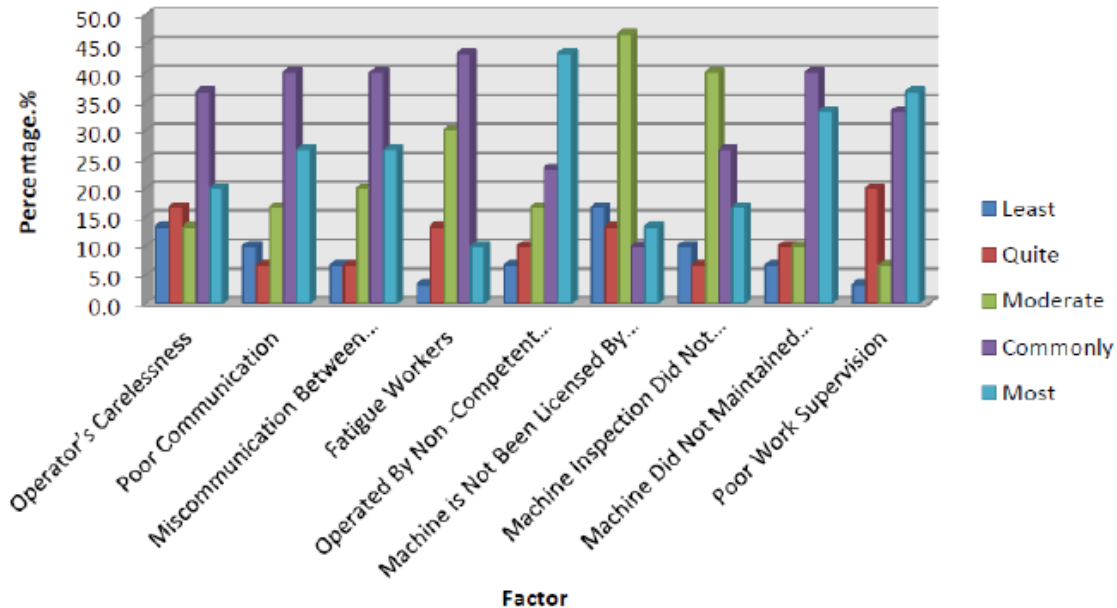
Abstract. The role of the construction industry in moving the nation's economy forward cannot be underestimated as it grows rapidly in each year. Even when the global economy faces uncertainties, property sector still relatively stable. The construction industry extensively linked with many other sectors of the economy. Therefore, construction industry acts as an economic engine in Malaysia. However, without proper safety management of construction machines at construction sites, accidents could happen. Cranes are the machines that contribute to highest fatality rate in construction industry. The aim of this project is to identify safe practices to be implemented for crane machine in order to reduce hazards in constructions in Malaysia. All information and data were collected through questionnaire surveys from professionals, interview with expert panels and case studies of crane accident cases in Malaysia. The paper concluded that cranes are machines with high risk and should be operated with safety management and strong communication between crane operator and signalman.

Study by Malaysian University, 2016

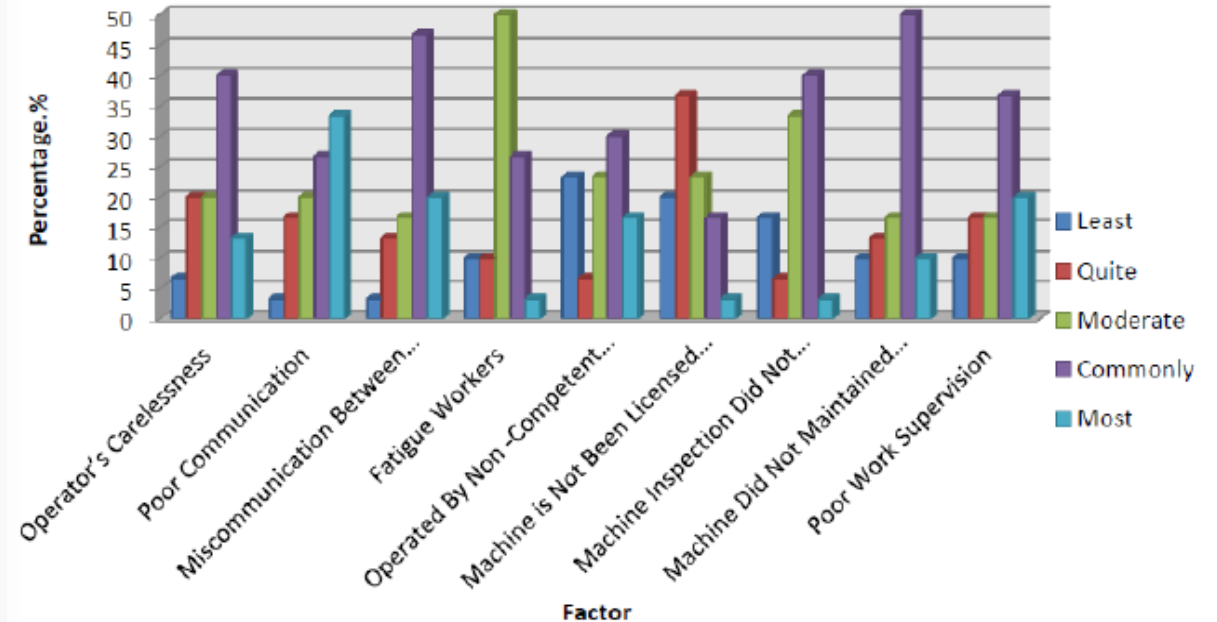


Human error related causes

Human Error That Lead to Tower Crane Failure and Accident



Human Error That Lead to Mobile Crane Failure and Accident





Impact on national economy



No National statistical data shown reflecting the cost of poor quality from non competent Inspection activities



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**ACCREDITATION
A TOOL TO SUPPORT REGULATORS**



How do I gain confidence in an
Inspection Body?

Do they need ISO 9001 certification or
ISO/IEC 17020 accreditation?



How does accredited inspection
benefit Government and Regulators?



Accreditation:
Delivering Global Confidence



Why accreditation is important for IB?

Government bodies & Regulators are called to make decisions related to:

- Protecting the health and welfare of consumers and the public
- Protecting the environment
- Measuring compliance with regulatory and legal requirements



More benefits

- Accreditation helps to improve harmonization within national regulatory and legislative structures.
- When several Government bodies perform similar tasks in different regions of the country, accreditation often becomes the technical platform to harmonize the imposed requirements in the country.

When an inspection body is accredited, it has demonstrated that a prescribed level of technical competence to perform specific types of inspection activities has been achieved.



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The only Government who mandate Accreditation across many sectors





IB and other CAB activities

Inspection involves examinations by competent personnel using techniques such as:

- Visual examination
- Visual comparison with standards (e.g. colour matching)
- Dimensional checks
- Examination using gauges and instruments.





The technical competence of an inspection body depends on a number of factors:

- Staff with sound knowledge, skills, experience and professional judgement
- The right equipment – properly maintained and, where necessary, calibrated
- Appropriate sampling practices
- sound inspection procedures
- Accurate recording and reporting of evidence and inspection results
- Adequate quality assurance and quality control



Objective of

- Increasing confidence in inspection outcomes used to support policy decisions makers and regulators.
- Providing (Government & Privet sectors) with an independent (third party) attestation that is based on an internationally recognised standard
- Reducing uncertainties associated with decisions that affect human health and the environment.
- Increasing public confidence, and achieving National Strategic Goals.



Issuance of mandated Scopes for Accreditation by ENAS



Issuance of Mandated Scopes Based on the Cabinet Decision No 35 for the year 2015 and based on board of director decision No 77 for the year 2016 on accepting the list of Mandated scopes:

Mandated Scopes Activated:

- **lifting equipment's Inspection.**
- Geotechnical/Soil Investigation Testing.
- Trailers and Semi Trailers Inspection.
- Number of accredited bodies in Mandated scopes:
- For Inspection bodies= 40
- For Geotechnical = 25
- Percentage of Mandated Scopes covered = 25%





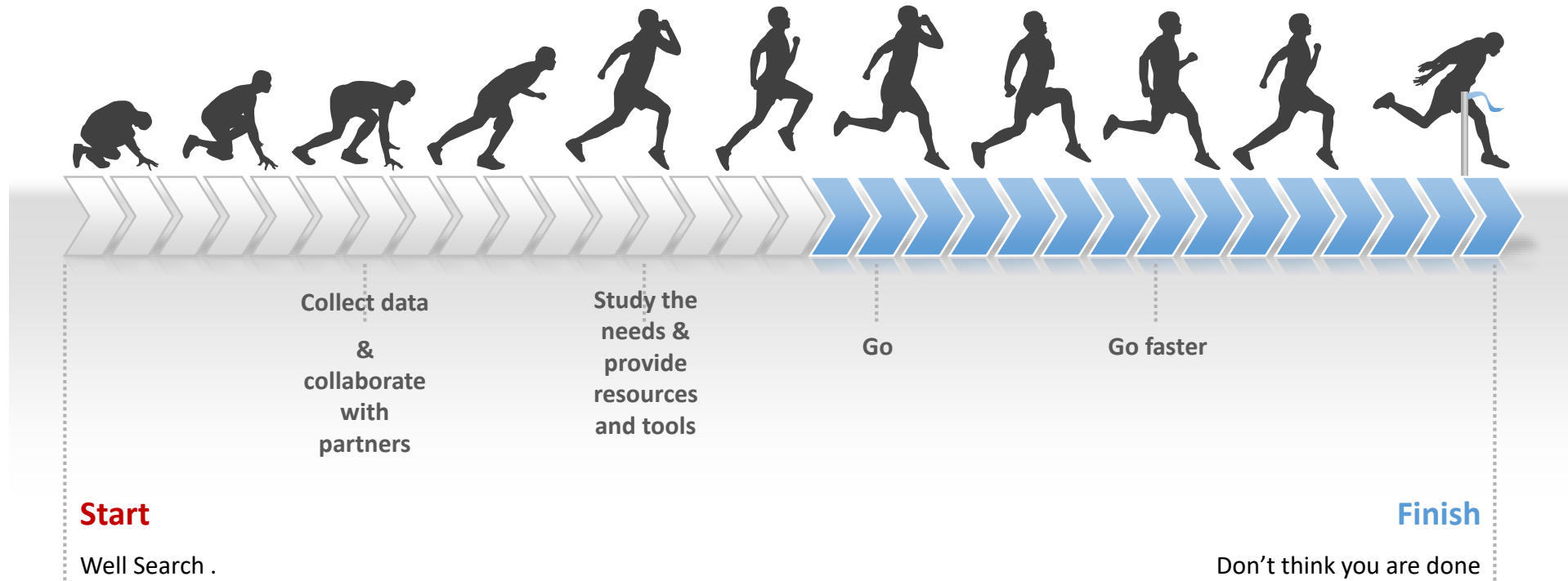
How will do it

- Improving the efficiency of the assessment process, which reduce cost and save lives, through harmonized check list with minimal criteria to be checked during inspection activity.
- Accreditation scheme for personal certification of inspectors is an essential to ensure competency of inspectors.
- Technical Regulation to complete the cycle in enhancing the competency of inspection bodies and support accreditation to allow fair competent safe market.. (to be reviewed and updated)
- Adopting PT program as a tool to assess sustainability of inspector's competency and inspection process and evidence on competency to accreditation body.
- Opening a communication Channel with IB for feedback and info gathering.



Are we done? Not yet!

Global race





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2071 The World's Leading Nation





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عام
زايـد



YEAR OF
ZAYED

"Education is like a lantern
which lights your way
in a dark alley"





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www.esma.gov.ae

Emirate National Accreditation System

www.enas.gov.ae

Thank you