

~~AFFORDABLE~~

Sustainability
PROFITABLE”





WE LIVE IN A WORLD WHERE A TREE IS WORTH MORE DEAD THAN ALIVE.
WE MUST CHANGE THE WAY OUR ECONOMY WORKS

.

THIS RELIGION OF PROFIT AT ALL COST MUST END

”

Consumptionism

- An [ideology], or system of beliefs, that prioritizes consumption and spending [above all] else.

Most of us practice this, while our credit [lender] encourages it.



1962-1995



MISSION life

From mindless consumption to mindful utilisation

- Prime Minister Modi, COP26

On 1st and 2nd October 2019, international experts will gather in Hamburg at the City Science Summit to discuss which digital technologies will shape everyday life in future cities. The conference title "Cities without..." invites us to open up spaces for thought and fill vacancies with visions for the city as a living space.

bedd
as Bedd and the...
Work

The City Science
University Ham
Institute of Tec

The conference
and free of cha
mandatory:

www.CityScience

The City Science Summit develops
sustainable solutions for the future
design of diverse, economically

WITHOUT

City Science Summit "Cities without"



find and help

CITIES WITHOUT



- The Power of **WITHOUT**

- Kent Larson and Norman Foster, MIT Media Lab



SANITATION WITHOUT SEWERS

The background is a solid orange color. On the left side, there is a short, horizontal red dash.

— URBANITY WITHOUT ROADS

—

POWER WITHOUT GRIDS



The Power of WITHOUT

HOUSING WITHOUT CONSTRUCTION



SANITATION WITHOUT SEWERS

MOBILITY WITHOUT CARS

COMMUNICATION WITHOUT CARRIERS

FOOD WITHOUT SOIL



The Power of WITHOUT

CITIES WITHOUT

-Kent Larson & Norman Foster,
MIT Media Design Lab



PROFITABLE SUSTAINABLE DEVELOPMENT

Does Sustainable Development Cost More ?



TO DESIGN ?



TO BUILD ?



TO OPERATE ?

CASE
STUDY

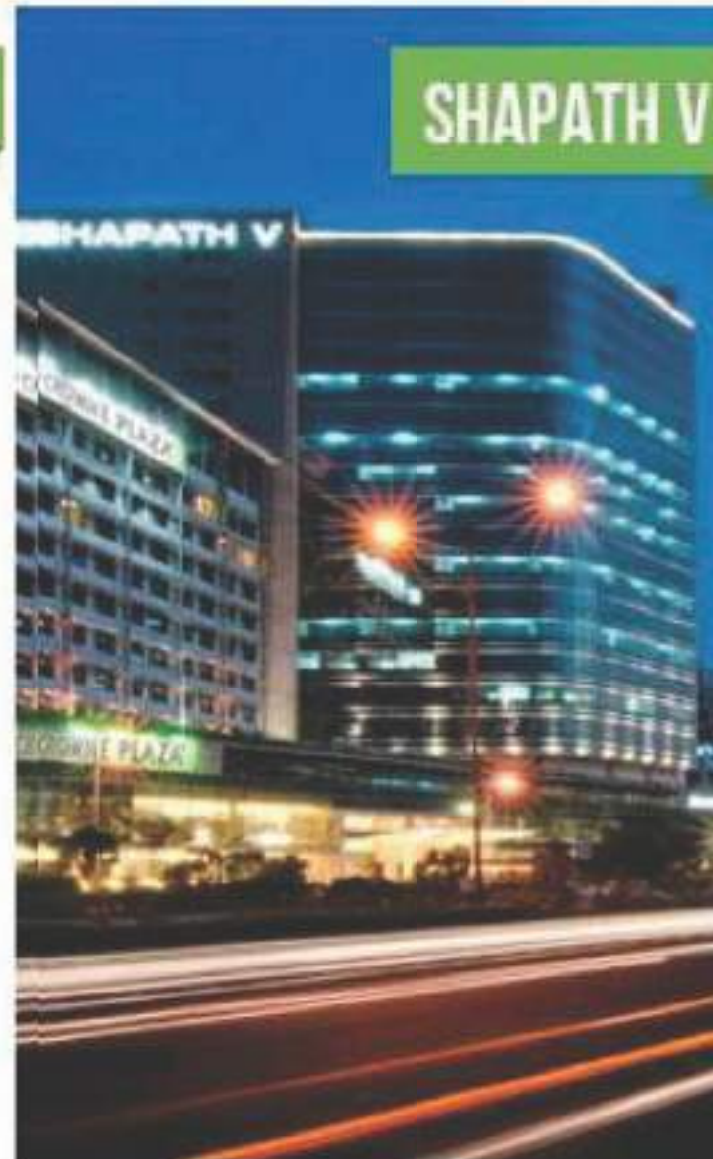
2013

CONVENTIONAL BUILDING



Cost of Construction:
2000 Rs / sqft

SHAPATH V



IGBC
Gold Certified

4,50,000
sq. ft.

Difference per sq. ft.
INR 114.11

Percentage Difference
6.35%

2017-2018

CONVENTIONAL BUILDING



Cost of Construction:
2400 Rs / sqft

PRAGYA-1



IGBC
Platinum Certified

4,50,000
sq. ft.

Difference per sq. ft.
INR 22.67

Percentage Difference
1.02%

CASE
STUDY

2022-2024

CONVENTIONAL BUILDING



Cost of Construction:
2800 Rs / sqft

PRAGYA-2



Targeted: IGBC
Platinum Certificate

Projected

4,50,000
sq. ft.

Difference per sq. ft.

INR 0.28

Percentage Difference

0.001%

GREEN HOMES

CASE
STUDY

BASECASE VS SHIVALIK BUILDINGS



SHIVALIK AVENUE



3,00,000
sq. ft.

Percentage Energy
Savings

15%



SHIVALIK SHARDA HARMONY



4,50,000
sq. ft.

Percentage Energy
Savings

22%

AIR CONDITIONING LOAD

2022 OPERATIONAL
EFFICIENCY
750 SFT/TR

2015 OPERATIONAL EFFICIENCY
600 SFT/TR

2010 DESIGN CASE
400 SFT/TR

CONVENTIONAL
150 SFT/TR

CONVENTIONAL BUILDING
150 SFT / TR

Shapath V -HVAC Invoice	
Bill No.:	SV_011_014
Client / Occupant Name :	Provino Technologies
Billing period :	From office commencement to 30 th November,2014
Office No. :	401
Area in Sq.ft :	1225
Total AHU ton:	2.16
HVAC Charges :	
1. Fixed cost: (Rs1.15 per sq.ft per month)	13781.25 (from April to November, 2014)
2. Standard working hours cost (9 a.m to 9 p.m)	41523
3. Odd working hours cost :(9 p.m to 9 a.m)	
Total Payable before due date	55304
Penalty after Due date- 25 th January,2015	1106
Total Payable after Due date	56410

SHAPATH V HVAC SYSTEM & ENERGY EFFICIENCY:

Savings calculation in comparison to standard conventional Split AC system:

Standard TR= 125 Sq.FT per Ton (on carpet area)

Standard unit rate: Rs. 8 / KWH

Standard working hours= As per actual

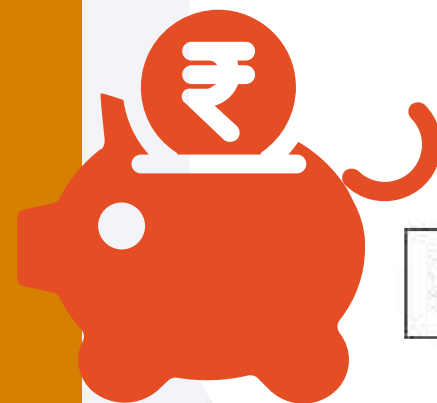
Standard working Days= As per actual

Diversity= 0.80

Calculation of bill as per conventional = Conventional TR x Unit factor X
Unit rate X Working Hours X Working days X diversity
=60540

Actual Bill form HVAC system = 41523

Total Savings = 31%



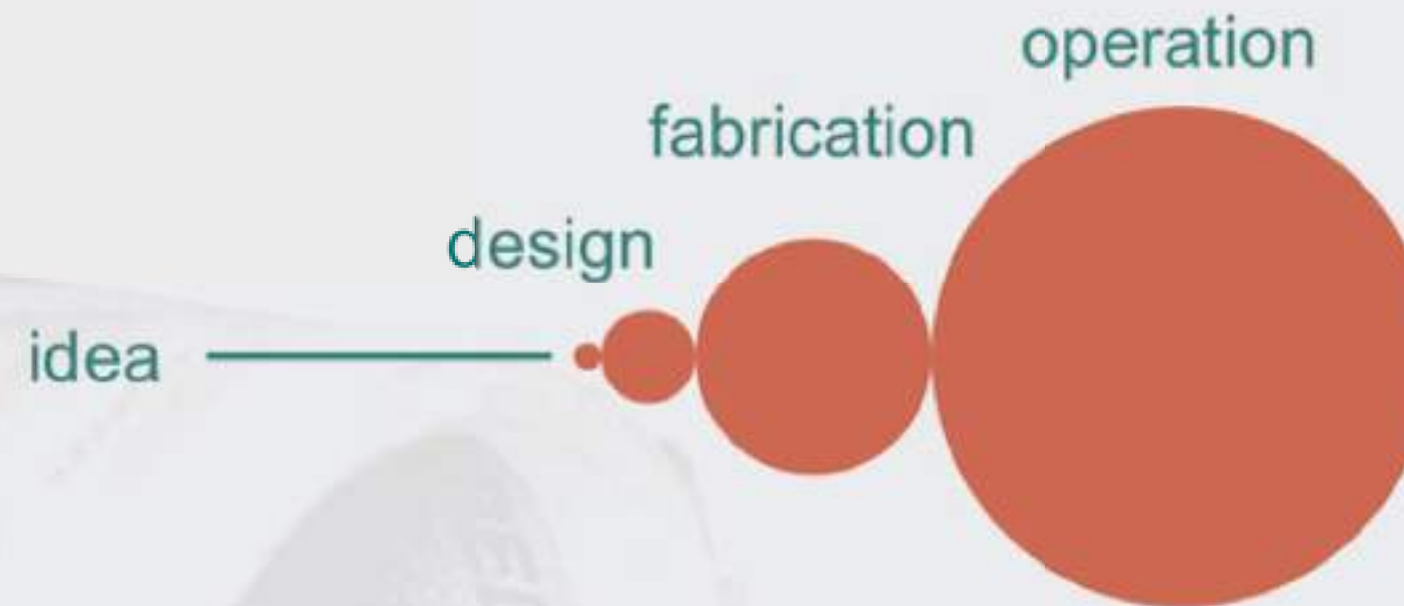
8 - 9 Rs./Sq.ft. Savings in Operational Cost

The Cost of a Building

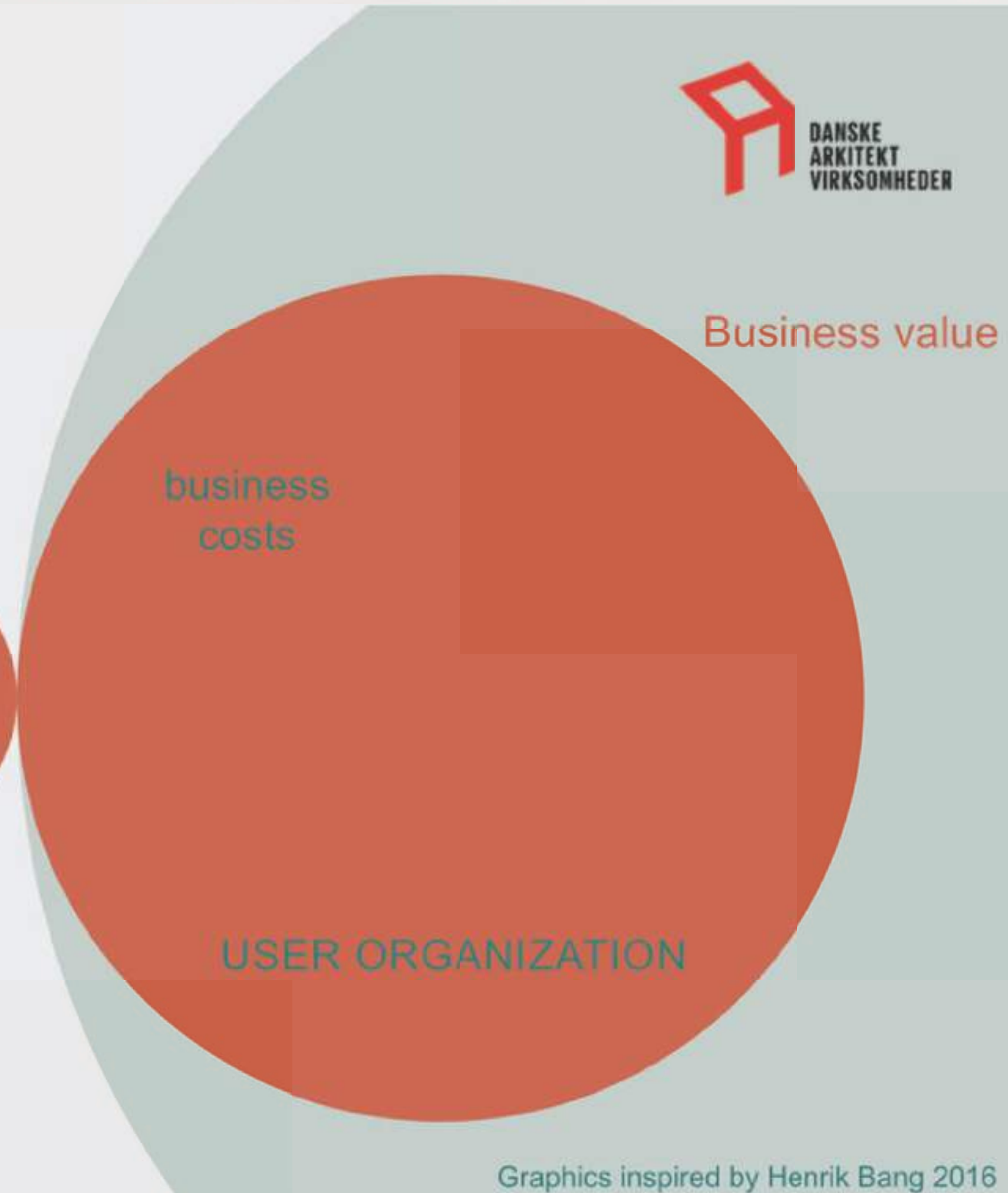
Do we not have a very myopic view of calculating cost ?

Value

Cost



BUILT ENVIRONMENT



Value Creation of Sustainable Development

Do we not have a very myopic view of calculating cost ?

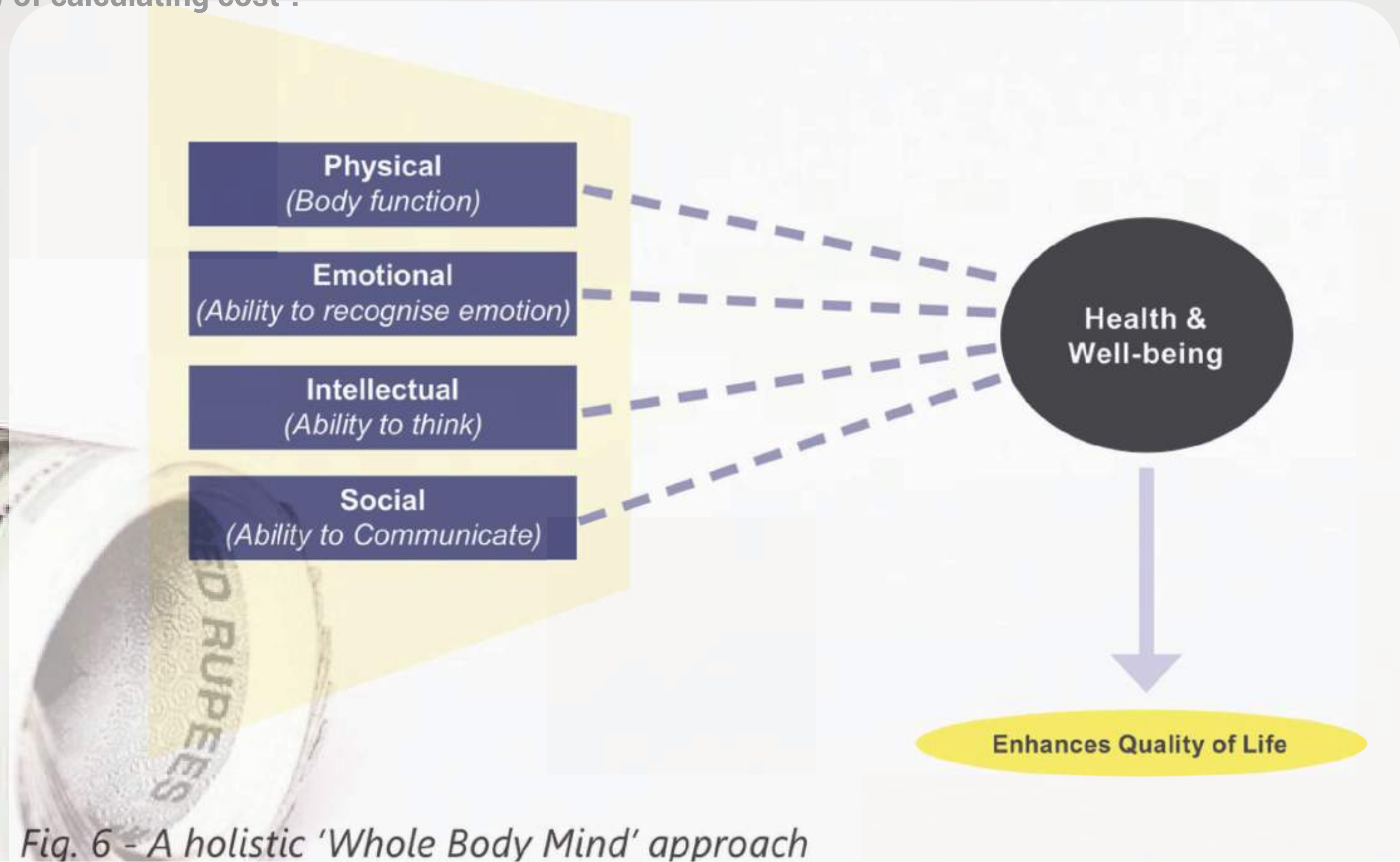


Fig. 6 - A holistic 'Whole Body Mind' approach

Value Creation of Sustainable Development

SUSTAINABLE WORKSPACES AND INDIAN BUSINESS ENVIRONMENT VISION FOR FUTURE

JUNE 2022

CONFEDERATION OF INDIAN INDUSTRY

STRATEGIC
AND ENVIRONMENT
ADJUSTMENT

INDIAN
BUSINESS
ENVIRONMENT

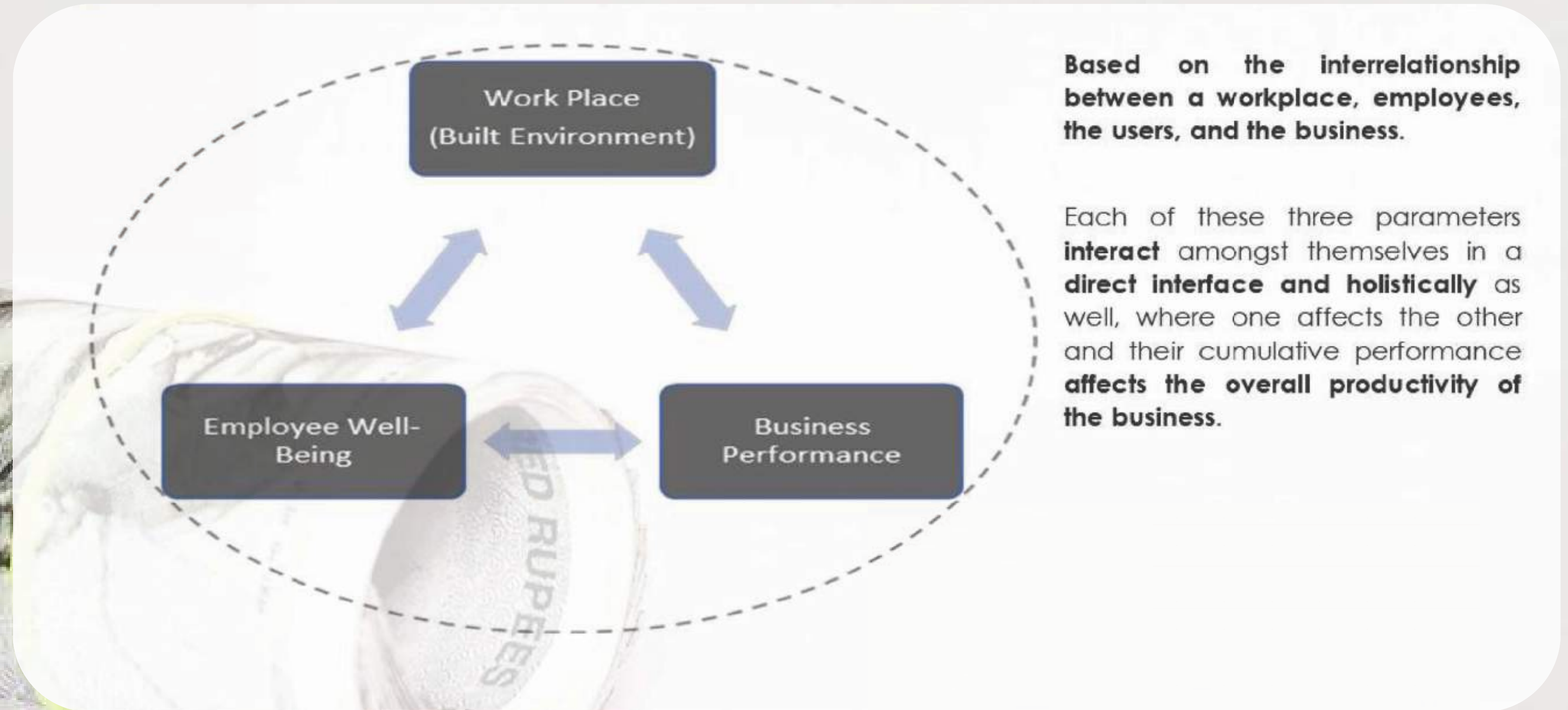
MINISTRY OF FOREIGN AFFAIRS
OF INDIA

INDIA

CONFEDERATION OF INDIAN INDUSTRY

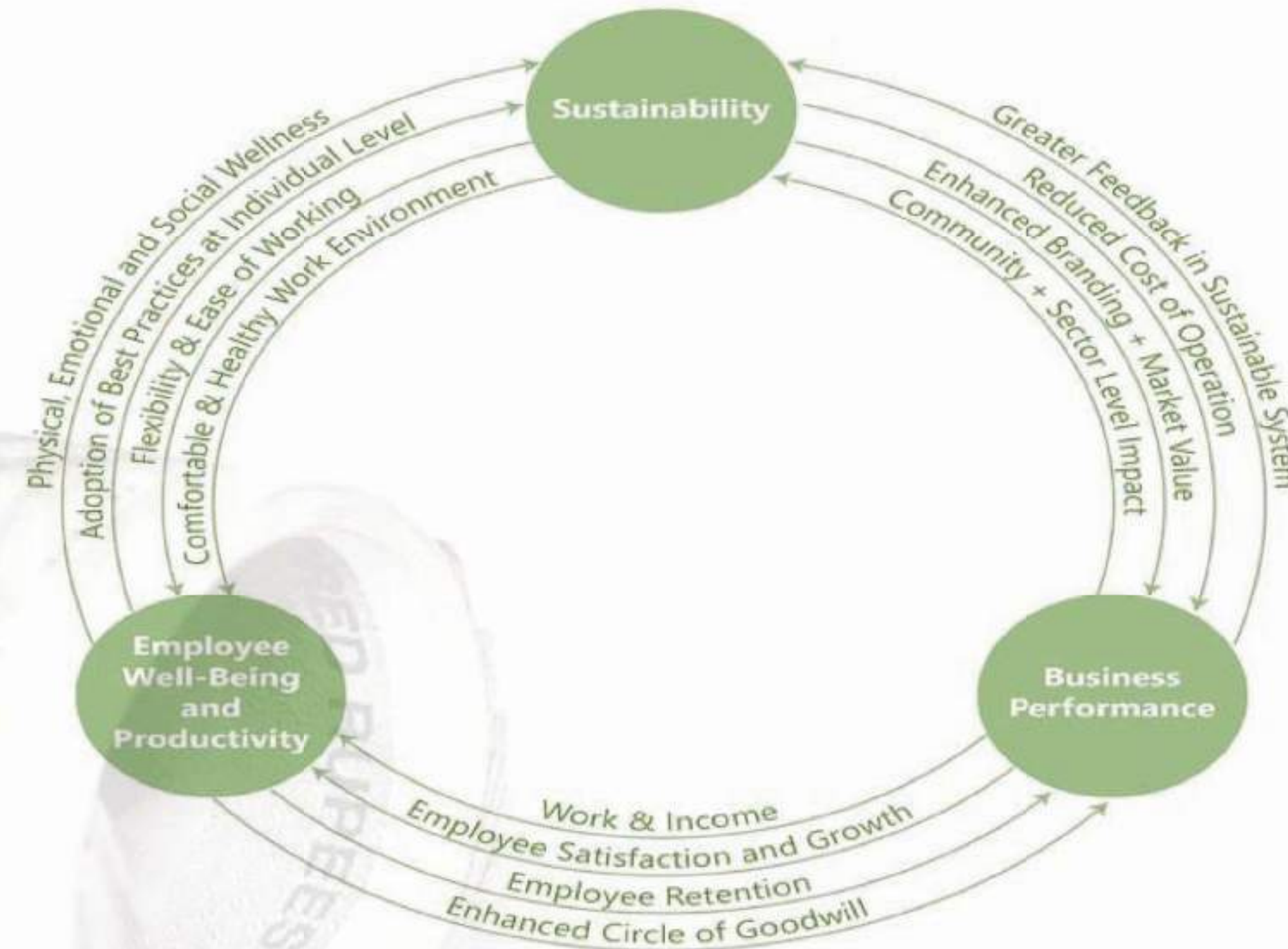
CII

Value Creation of Sustainable Development



Value Creation of Sustainable Development

DECODING THE CORRELATION





People , Planet, Profit

~~Profit~~

~~= Revenue - Environmental Cost - People Cost~~

Financial Profit

= Societal Profit + Environmental Profit

TRIPLE BOTTOMLINE

Financial Profit + Societal Profit + Environmental Profit

1. Factory Processes
2. Longevity
3. Circularity
4. Manufacturing Miles
5. Company Kindness





The challenge is **LEADERSHIP**

STUBBORNNESS

PASSION

COURAGE

...is compassion for others

COURAGE

**Moral Courage is rarer than bravery in battle
but is the one quality that will change the world.**

