

# Foresight Techniques – New Paradigm

Dr Gautam Goswami Head, Foresight & Vision Division TIFAC, DST

Technology Information, Forecasting & Assessment Council (TIFAC), (Department of Science & Technology, Govt. of India) 'A' Wing, Viswakarma Bhavan, Saheed Jeet Singh Marg, New Delhi – 110 016.

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"It's funny how day by day, nothing changes.

But when you look back everything is different."

- Calvin and Hobbes



#### "YOUR FUTURE IS CREATED BY WHAT YOU DO SCREATED BY WHAT YOU DO SCREATED BY WHAT TODDAY SCREATED BY WHAT YOU DO SCREATED BY WHAT



# "The best way to predict the future is to create it"



#### **Users of foresight outputs**





# Foresight Methodology – a close look

Foresight methodology depends on the narrative, clients

Long term foresight, vision for Nation, State – Mostly qualitative technique

Foresight for Company, business etc. – Quantitative technique

Demand Supply projections - Quantitative technique



#### What is Foresight?



Source: EC FOR-LEARN Guide

## **Classic Foresight Process**



Organising a process that brings together a variety of actors over a period of time... ...using a variety of <u>methods</u> to obtain, analyse and discuss future-oriented knowledge... ...and building <u>networks</u> to shape visions and strategies for joint action.



### Gathering knowledge & knit it together **Expert Economics...** opinion. Policy... Trends... **Available Stakeholder Factual** Citizen's technologies inputs... evidence... views...



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EXPERTISE



#### **METHODOLOGY** for preparation of Vision Document



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## **Decision Metrics**

(	NAMPLE	CRIT	ERION	FOR F	PRIORI	TIZAT	ION O	F TEC	HNOL	OGIES			
	Criterion	Afford ability	Imple menta ble /replic able	GHG Reduc tion Potent ial	Readi ness level	Energ Y Effici ency	R3 (Redu ce, Reuse, Recycl e) potent ial	Labo ur inten sive /auto mati on	Emplo yment genera tion	Incom e genera tion	Total weighted score Rank x Weightag e ▼	Final ranking V	
	Weightage (%) To be decided	10	5	25	5	20	15	5	5	10		participate the we need to tak the average of	
Theme ▼	Score	1-100	1-100	1-100	1-100	1-100	1-100	1-100	1-100	1-100		rankings	
PAPER AND PULP													
Sub theme	Technology								Scor	e x Criteria	= Weighted s	score	
PAPER	Tech 1	60	40	50	10	50	40	35	20 60 x Tech	60 x 10% =6 (weighted score for Technology 1 for Criteria -			
	Tech 2								Affo	rdability)			
	Tech 3												
	Tech 4												

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## **Quantitative Technique**



Analytical methods used to anticipate future trends, developments, and events by employing numerical data and mathematical models

#### **Data Analysis:**

- **Historical Data Analysis** to identify patterns and trends (economic indicators, social trends, technological advancements, and other relevant data sources)
- **Big Data Analytics:** Enhance data analysis of vast and diverse datasets. This includes structured and unstructured data from various sources.
- Statistical Analysis: Regression analysis to understand the relationships between different variables

#### Machine Learning and Artificial Intelligence

- Predictive Modeling: Machine learning algorithms can be trained on historical data to predict future outcomes
- Natural Language Processing (NLP) to analyze textual data, such as news articles and social media, to

extract insights and sentiment that contribute to forecasting.

Risk Modeling: To assess and quantify the risks associated with different scenarios