

Need for Ambidexterity for Business Transformation in HAL – An Empirical Analysis

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Agenda

Introduction

Analysis of the Indian Aerospace industry

Defining VUCA – in general & in A&D

Strategising in a VUCA world- HAL's Perspective

Project management approach to develop Ambidexterity in HAL

Success story: Development of Indigenous trainer aircraft HTT-40

Concepts and Lessons for the future

Conclusion

Analysis of the Indian Aerospace industry



- Manufacturing base
- Trained Manpower

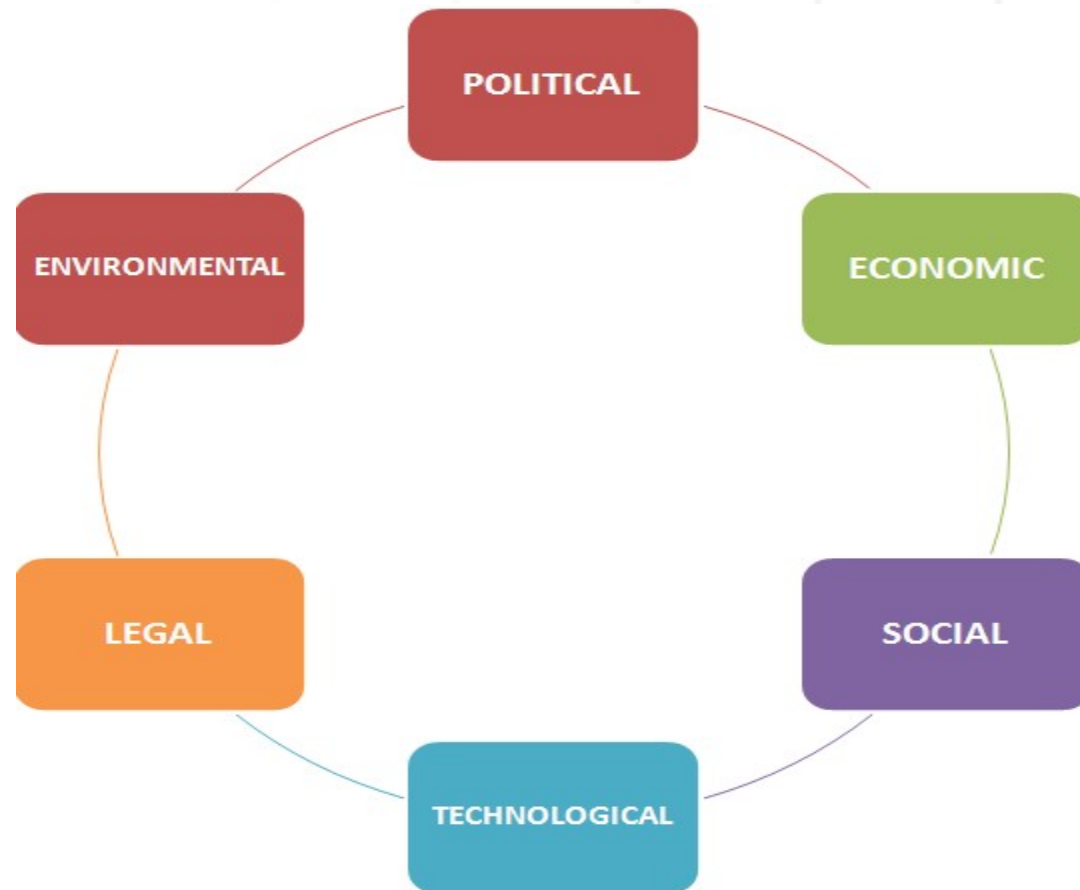


- Lack of Collaborative Supply Chain
- Gap In Technical Capability & Current R&D Situation
- Poor Stakeholder Management
- Less Synergy In Industry-Academia
- Absence Of Lead Industry Trainers & Lack Of Trg. & Certifications For Aerospace Professionals

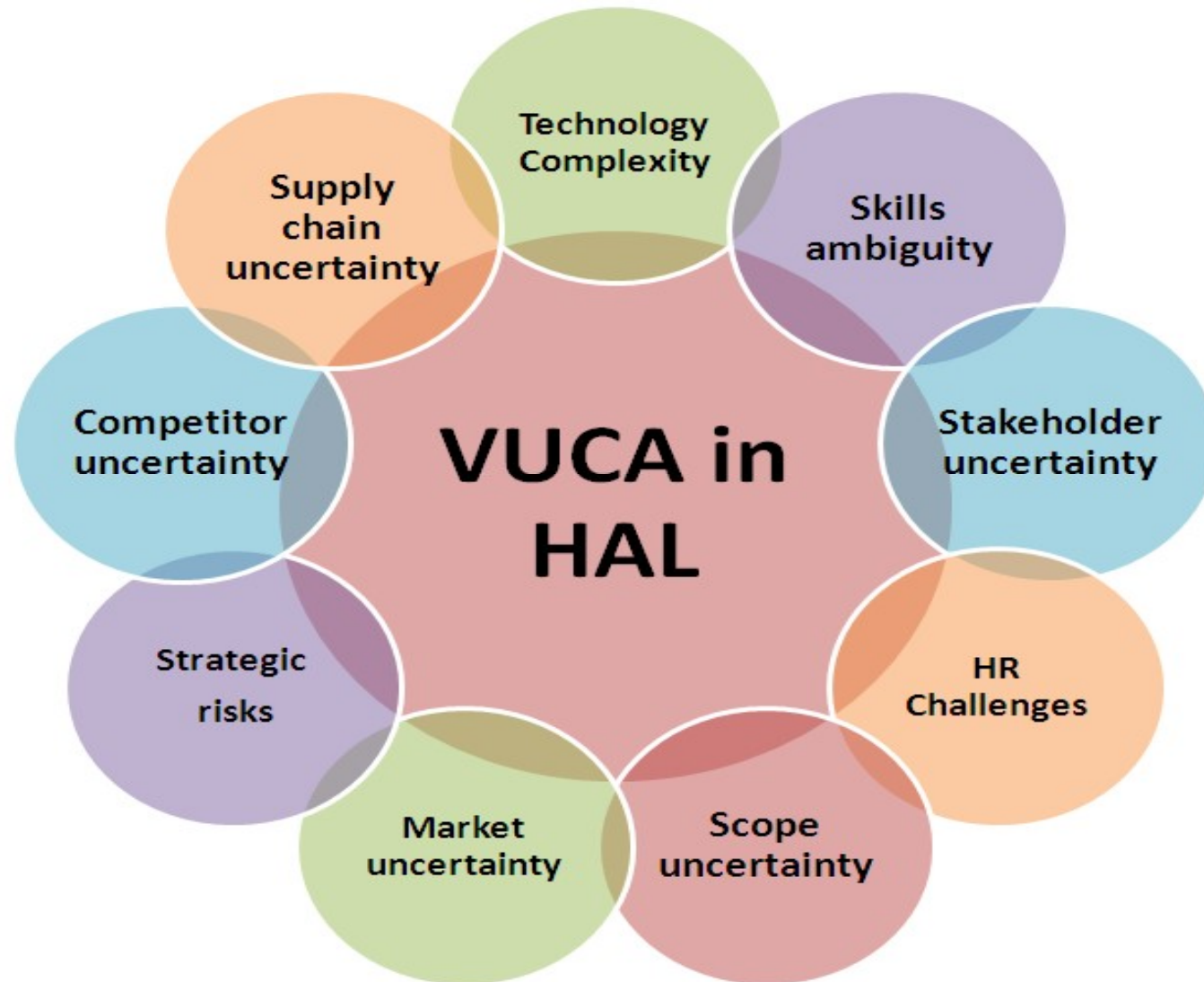
Defining VUCA

	DRIVERS	EFFECTS	DEMANDS
Volatility	<ul style="list-style-type: none"> Change nature Change dynamics Change rate and speed 	<ul style="list-style-type: none"> Risk Instability Flux 	VISION <ul style="list-style-type: none"> Take actions Probe changes
Uncertainty	<ul style="list-style-type: none"> Unpredictability Potential surprises Unpredictable outcomes 	<ul style="list-style-type: none"> Direction paralysis due to information overload 	UNDERSTANDING <ul style="list-style-type: none"> Wider understanding Different perspectives
Complexity	<ul style="list-style-type: none"> Task co-relation Multifaceted effects Influencers 	<ul style="list-style-type: none"> Unproductive Dualities 	CLARITY <ul style="list-style-type: none"> Key focus Flexible Creative
Ambiguity	<ul style="list-style-type: none"> Ideal vs actual Misinterpretation 	<ul style="list-style-type: none"> Induce doubt and distrust Lapses in decision making Hurt innovations 	AGILITY <ul style="list-style-type: none"> Decision making Innovation

VUCA in A&D – PESTLE ANALYSIS



VUCA in A&D - HAL



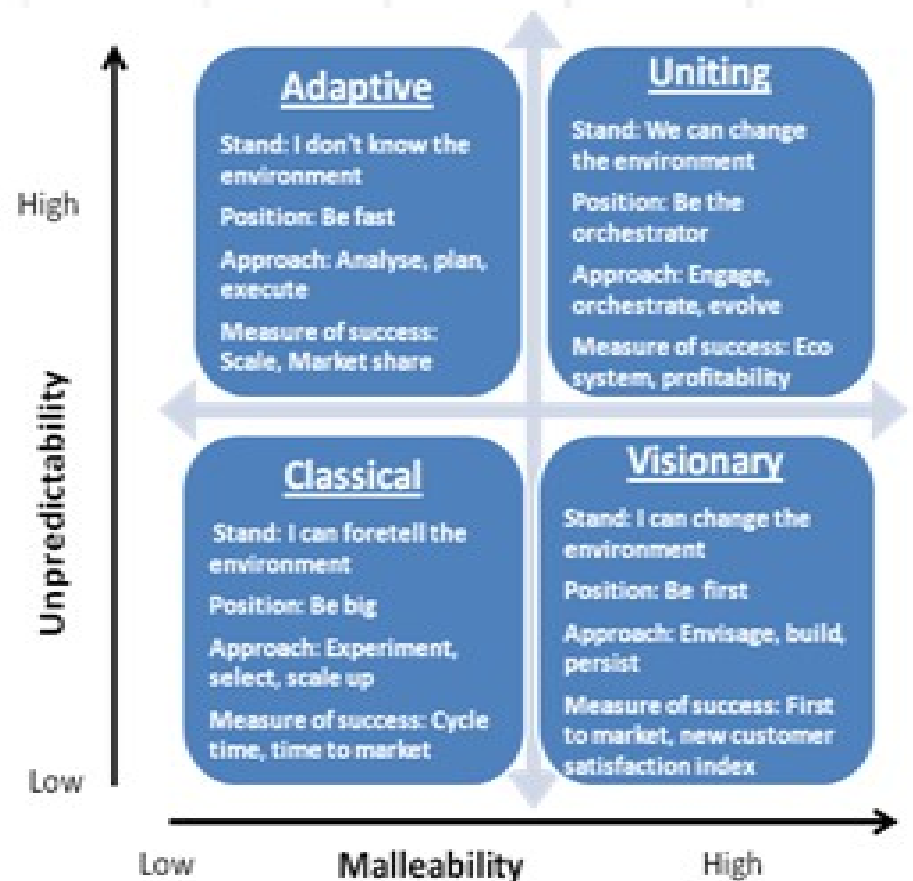
Strategising in a VUCA world - HAL's Perspective

Strategic foresights and frameworks:

- Classical – Assumptions are: Environment is a given and future is predictable
- Anticipatory approach
- Collaborative approach
- Adaptive approach

Most effective VUCA breakthrough strategy:

- Predicting & **Leading 'VUCA'**, **Anticipatory planning**, Strategic foresight, **Foretelling 'black swan' events**



Ambidextrous organisation



Project management approach to develop Ambidexterity in HAL

- Early and deep stakeholder engagement – mitigating
 - Supply chain uncertainty
 - Technology complexity
 - Industry – Academia collaboration
 - Skills ambiguity
 - Competitor uncertainty
- Strategic Risk management
 - Market risk mitigation by investing in UAVs & using back casting tool
 - Technology risk mitigation through open system architecture
- Scope management and assumptions analysis
- Robust change management processes
- HR management – Creating a ‘Learning organisation’



Success story: Development of Indigenous trainer aircraft HTT-40

HTT-40 – Basic trainer aircraft

- Program that follows 'Project orgn structure' within a functional orgn
- Milestone – Inaugural flight on June 17, 2016
- Prototype flown within 1 year of detailed design phase that was completed in May 2015
- Proves effectiveness of leading VUCA, embracing ambidexterity by weaving projectised approach within a functional organisation making structural, cultural and strategic changes



Success story: Implementing ambidexterity strategies in HTT-40

Ambidextrous strategies adopted

- Strengthening supply chain through procurement of common systems across platforms like LCA
- Experience team lead by a PMI-certified Project manager
- Team handpicked by top mgmt with average age <35
- Specifications decided by HAL mitigating competitor uncertainty
- Scope management and change management effective as trainer is a made-to market model
- Technology risk - Engine unavailability mitigated by flying prototype with CAT-B



Concepts and Lessons for the future

- Breakthrough strategy – Not faster response or agility but Anticipating the stimulus, anticipatory planning and foretelling the ‘black swan event’
- Focus on strategic human resource management and keeping pace with rapid technology advancement
- HAL’s success behind HTT-40 Program - Projectised approach within a functional organisation making structural, cultural and strategic changes
- Proposed ***strategic foresight and project management approach – effective for a Business Transformation!***

Conclusion – Key takeaways



Need for foretelling 'black swan' event & *leading the VUCA*



Encouraging 'Ambidextrous', 'Collaborative' & 'Anticipatory' attitudes in business strategy



Creation of a Learning organisation



Strategic foresight and project management approach



Embracing 'ambidexterity' - a panache to create a better response to VUCA



NOTHING HAPPENS
until the pain of **REMAINING THE SAME**
OUTWEIGHS *the pain of* **CHANGE.**

~ Arthur Burt