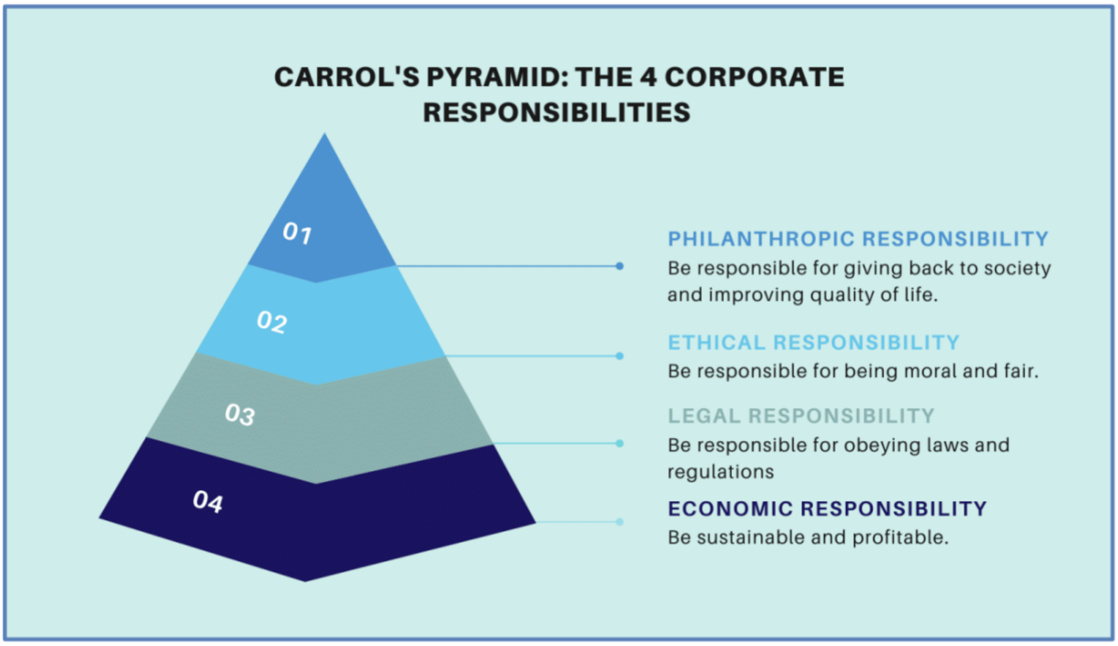
22/23 SEM 2
MT0003 PROFESSIONALS AND SOCIETY

1. The five key maritime organizations in Singapore and their importance to the Singapore maritime eco-system are:
   *Choose any 5 *
   - **Singapore Shipping Association (SSA**). It was formed in <u>1985</u> to serve and promote the interests of its members and to enhance the competitiveness of Singapore as an International Maritime Centre (IMC). It represents over <u>470</u> member companies allied to the shipping industry.
   - **Singapore Maritime Employers Federation (SMEF)**. It was formed on <u>26 August 1955</u> as a trade union. It aims to promote and protect general interests of its members who are maritime employers. SMEF also aims to establish good industrial relations between maritime employers and the seafarers whom they employ on board their ships.
   - **MaritimeONE Connect**. It supports the mission of attracting, engaging and growing talent for Maritime Singapore. It also manages Singapore's only career portal dedicated to opportunities in the maritime cluster. MaritimeONE connect also runs a series of programme including case competitions, internship programme and industry talks at tertiary institutions. For example, MaritimeONE case summit 2023.
   - **Singapore Maritime Foundation (SMF).** Its twin mission to strengthen Singapore as an International Maritime Centre (IMC) and to nurture a maritime- ready talent pool. It connects Maritime Singapore to the world and fosters the cohesiveness of the industry. SMF also partners the industry to showcase maritime innovations to advance thought leadership.
   - **Singapore Maritime Institute (SMI**). It was a joint effort by the Maritime and Port Authority (MPA), Agency for Science, Technology and Research (A*STAR) and the Singapore Economic Development Board (EDB). SMI was established in <u>April 2011</u> and charts the maritime research strategy and promotes greater industry-academic R&D collaborations in Singapore.
   - **Association of Singapore Marine Industries (ASMI)**. It was formed in <u>1968</u> to promote the interests and advancement of the marine industries in Singapore. ASMI represents the different sectors of the marine and offshore industry. Members include big and small shipyards, local and foreign manufacturers and suppliers of marine equipment and components, marine engineering, and consultancy companies.
   - **Singapore Maritime Officers' Union (SMOU)**. It was established in 1951 to safeguard the interest and well-being of seafaring officers. SMOU plays pivotal role in promoting good industrial relations between members and their employers as well as improving wages and working conditions through Collective Bargaining Agreements (CBAs).

2. (a)

Corporate Social Responsibility (CSR) is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large. Early concept of CSR emerged in the 1960s which focuses on 'social' aspect that goes above and beyond economic and legal obligations (Carroll 1979). CSR today encompasses broad set of company performance measurements – environment, employee health and safety, transparency and corporate governance. CSR closely linked to a company's triple bottom line: financial (economic), social and environmental results. It evolved from being voluntary to mandatory (pressures from stakeholders) and then to an investment (for improvement of long-term business performance).

The first CSR theory would be **Carroll's CSR Pyramid Theory**. It imposes a four-part definition of CSR: economic, legal, ethical and philanthropic. Economic responsibilities most vital whilst philanthropic responsibilities considered least important. The diagram below shows the component of Carroll's CSR Pyramid Theory.

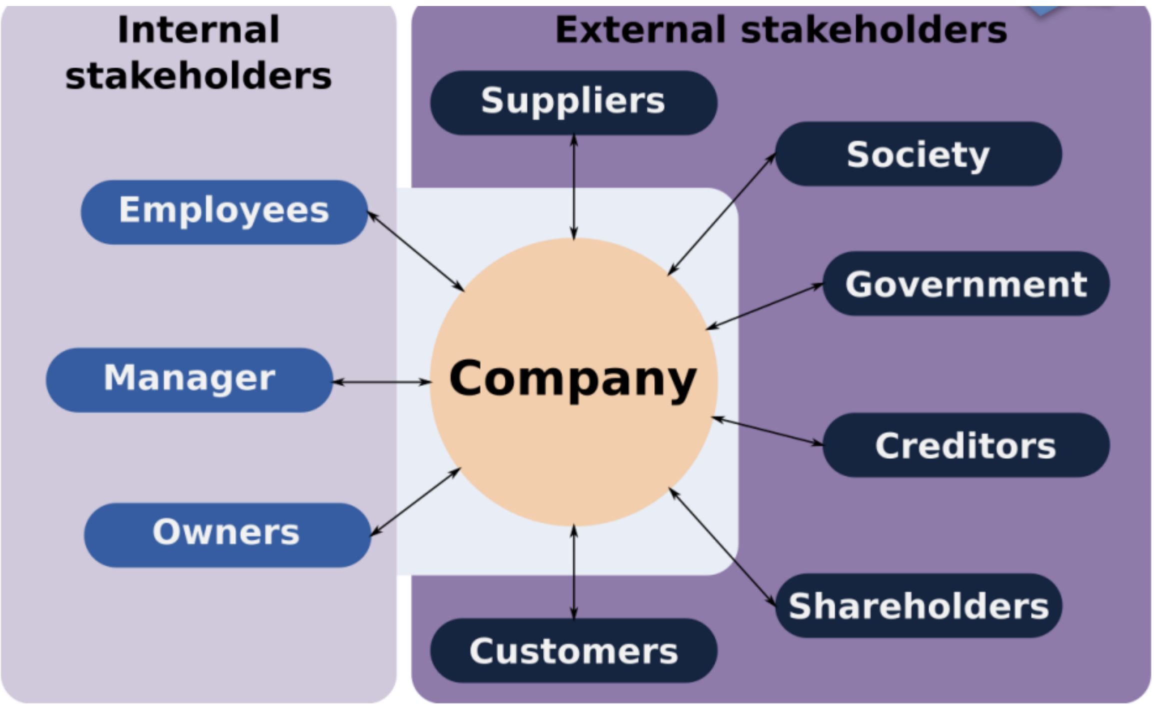


The primary duty of business organizations, in terms of <u>economic responsibility</u>, is to generate profits, which serve as the foundation of the CSR pyramid and are essential for business sustainability. These profits are crucial for rewarding investors and owners and must be reinvested to sustain business growth. They are represented through investments, marketing strategies, business operations, and long-term financial strategies. Furthermore, in terms of <u>legal responsibilities</u>, corporations are obligated to comply with laws and regulations. A responsible organisation recognises that conducting business fairly has a positive impact on the overall economy and society. It is irrational to consider a corporation as embodying CSR values if it engages in practices such as tax evasion or money laundering. Next, for ethical responsibility, corporations are expected to act as responsible members of society. This entails making decisions that benefit society, even if they are not legally mandated. For instance, ensuring that all materials used are ethically sourced is an example of fulfilling this responsibility. Lastly, philanthropic responsibility entails engaging in voluntary activities driven by a business's desire to contribute to social causes that are not legally mandated and may not be commonly regarded as ethical in a business context. This commitment aids in enhancing corporate reputation and fostering a positive image of good citizenship. Examples of such philanthropic actions include sponsoring sports activities, encouraging employee participation in donation campaigns, or donating a portion of the business's annual earnings to a prominent charitable cause.

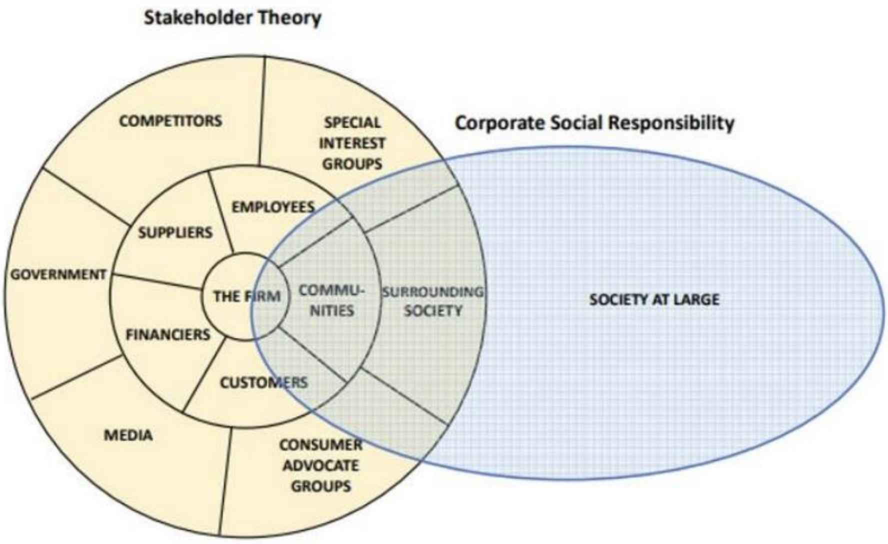
The second CSR theory is **Triple Bottom Line Theory (TBL)**. TBL is an accounting framework that includes social, environmental and financial results as bottom lines. TBL adds social and environmental concerns to help measure an organization’s impact on its surroundings which is measured using three P’s: profit, people and planet. The idea behind TBL is to gauge an organization’s commitment to corporate, environmental and social responsibilities. Large organisations tend to have bigger effect on surrounding people and environment and expanding their bottom line can help improve people’s lives and planet well-being.

The first dimension of the TBL framework is economic. It focuses on evaluating the financial performance and profitability of a business. According to the TBL theory, the primary objective for a company is to attain consistent profits in the long term, rather than solely pursuing high profits. This aspect of the framework assesses the business's contribution to the broader economy and the growth of its industry. The second dimension of the TBL framework is social, which focuses on assessing the organization's dedication to people. This dimension encompasses all stakeholders, including employees, individuals within the supply chain, customers, the community, and future generations. Various methods are employed to measure the organization's social impact, such as advancing human rights, contributing to global poverty or hunger alleviation initiatives, and promoting diversity, as well as racial and gender equality. For example, “LEGO build to give” campaign which encourages people to participate in building LEGO creations and sharing them with others. By engaging in this campaign, participants contribute to a charitable cause and spread joy to children in need. This initiative highlights the power of creativity, collaboration, and generosity in making a positive impact on society. The third dimension of the TBL framework is environmental, which focuses on evaluating and enhancing an organization's commitment to reducing its environmental impact. This includes measures such as reducing energy consumption, decreasing reliance on fossil fuels, and adopting alternative energy sources to minimize the use of traditional sources like oil, gas, and coal. By prioritizing sustainability practices, corporations aim to reduce their environmental footprint and promote a greener and more sustainable future.

The third CSR theory is **stakeholder theory** which emphasizes the inter-relationship between a business and its various stakeholders. Organisation should create value for its various stakeholders, who are affected by business actions and decisions, not just shareholders.



Stakeholder concerns encompass various aspects related to different entities involved in a business. The government focuses on matters such as taxation, legislation, employment regulations, truthful reporting, diversity, and legal compliance. Employees are concerned about rates of pay, job security, compensation, respect, and transparent communication. Customers value quality products, excellent customer care, and ethical practices. Suppliers seek equitable business opportunities and fair treatment as providers of products and services used in the end product for the customer. Creditors are concerned with credit scores, new contracts, and the liquidity of the business. The community cares about job creation, community involvement, environmental protection, fair distribution of shares, and transparent communication. Trade unions prioritize quality standards, worker protection, and job preservation. Owners are worried about profitability, long-term viability, market share, market standing, succession planning, raising capital, growth, and achieving social goals. Investors are primarily concerned with the return on their investment and generating income. Stakeholders are critical aspect of the success of CSR initiatives. Organisations would not be successful without the participation, expertise, know-how and loyalty of their various stakeholders.



2. (b)
The regulation of the maritime industry is a multifaceted and ongoing topic of discussion. Given the inherent risks and potential environmental impact associated with maritime activities, it can be argued that the industry is subject to a significant level of regulation. In fact, shipping is recognized as one of the most heavily regulated sectors, with early adoption of international safety standards. The purpose of these regulations is to prevent certain stakeholders from taking shortcuts at the expense of others. International regulations are developed to ensure uniformity in areas such as ship construction standards, navigational rules, and crew competence. However, determining whether the maritime industry is over or under regulated is subjective and depends on different perspectives.

Some stakeholders, particularly ship owners, may argue that the industry is overregulated. They point to the administrative burden, compliance costs, and complexities associated with meeting regulatory requirements. They express concerns that excessive regulation hampers innovation, competitiveness, and industry growth. For instance, regulations like SOLAS, MARPOL, COLREG, LOADLINE, and ISPS impose comprehensive standards for ship safety, pollution prevention, collision avoidance, load capacity, and security.

On the other hand, some stakeholders contend that the maritime industry is under-regulated, particularly in certain regions or regarding emerging issues like cybersecurity and digitalization. They highlight potential shortcomings in enforcement, non-compliance loopholes, and the need for enhanced regulations in these areas.

However, the effectiveness of regulations lies not only in their existence but also in their implementation and compliance by companies. Having numerous regulations in place may not necessarily lead to positive outcomes if they are not taken seriously or enforced adequately. It is crucial for companies to recognize the importance of regulations and actively incorporate them into their operations to ensure their effectiveness. Regulatory bodies and authorities also play a vital role in enforcing compliance and holding non-compliant companies accountable. Adequate enforcement measures, such as inspections, penalties for violations, and transparent reporting mechanisms, can help ensure that regulations are taken seriously and adhered to by all stakeholders. A strong focus on effective enforcement and fostering a culture of compliance is essential to ensure that regulations serve their intended purpose of promoting safety, sustainability, and responsible business practices.

Corporate Social Responsibility (CSR) is the ongoing commitment of businesses to uphold ethical standards, contribute to economic development, and improve the well-being of their workforce, families, local communities, and society at large. In my opinion, an industry-wide CSR policy is essential. When effectively implemented, CSR policies can have a positive impact on society, the environment, and the long-term sustainability of the industry as a whole. An industry-wide CSR policy establishes consistent standards and guidelines for responsible behaviour across the sector. It ensures that all companies within the industry are held to similar expectations, fostering fair competition and preventing those neglecting social and environmental responsibilities from gaining unfair advantages.

Moreover, an industry-wide CSR policy enhances the industry's reputation and builds trust among key stakeholders such as consumers, employees, investors, and communities. By demonstrating a collective commitment to ethical practices, sustainability, and social impact, the industry can attract customers, investors, and talented individuals who prioritize responsible business conduct.

Furthermore, an industry-wide CSR policy promotes collaboration and knowledge sharing among industry players. It provides a platform for exchanging best practices, addressing shared challenges, and collectively pursuing sustainable solutions.

Through this collaboration, the industry can drive improvements in areas such as environmental sustainability, labour standards, supply chain transparency, and community engagement.

In conclusion, it is important to strike a balance in regulation and CSR policies to avoid excessive burden on the industry. Regulatory frameworks and CSR policies should be well-crafted, flexible, and adaptable to the specific characteristics and needs of the maritime sector. Collaboration between governments, industry organizations, and other stakeholders is crucial to ensure effective regulation, enforcement, and the development of comprehensive CSR policies in the maritime industry.

3. (a)
The shipping industry is facing increasing pressure to decarbonize in order to meet global climate targets. By 2050, there is a high probability of new fuels such as hydrogen, ammonia, methanol, and biofuels being developed and adopted, leading to a significant reduction in fossil fuel usage. Vessels will need to be equipped with new technologies to improve energy efficiency and reduce emissions, ultimately aiming for "zero carbon" operations.

In addition to decarbonization, the industry must prioritize other aspects of sustainability. Efforts should be focused on minimizing pollution, protecting marine ecosystems, and effectively managing ballast water to prevent the spread of invasive species. These actions are crucial for achieving the United Nations Sustainable Development Goals (UN SDGs), particularly Goal 13: Climate Action, Goal 14: Life Below Water, and Goal 8: Decent Work and Economic Growth.

Reshaping the way shipping operates requires a comprehensive approach that aligns with the principles of the UN SDGs. It involves adopting cleaner energy sources, improving efficiency, implementing stricter regulations, and promoting sustainable practices throughout the industry. Collaboration among stakeholders, including governments, international organizations, and industry players, is essential to drive the necessary changes and ensure a sustainable future for the shipping industry and the planet as a whole.

3. (b)

Five challenges as at hand:

- International Maritime Organization (IMO) CO_2 emissions regulations pose significant difficulties, with medium-term regulations by 2030 and long-term regulations by 2050 requiring drastic technological advancements.
- New digital technologies such as Artificial Intelligence (AI), Software as a Service (SaaS) and autonomy are right around the bend. The industry is starting to embrace these technologies in many ways including financial decisions, operational oversight and safety.
- Capital markets. Systemic changes in the way ships are designed, built and financed may be necessary. Alternative financing and equity markets as alternatives to capital markets need to be explored.
- New IMO cyber security regulations. Shipping company's Safety Management Systems will need to document compliance. Risk assessments, standard cybersecurity operating procedures, education and training are all requirements that need to be addressed.
- The Poseidon Principles. a climate alignment initiative developed by leading shipping banks to establish a common, global framework to quantitatively assess and disclose whether financial institutions' lending portfolios are in line with adopted climate goals.
- Environmental, social and governance (ESG). criteria may curtail financing if companies do not adopt it. ESG is a set of standards for a company's operations that socially conscious investors use to screen potential investments. As more institutional investors adopt ESG, companies will need to embrace ESG strategies or risk losing investors.

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