2.5	28	22
4	37	26
6	46	33
10	66	47
16	87	62
25	118	81
35	147	100
50	179	122
70	230	151
95	289	191
120	337	219
150	385	252
185	449	288
240	542	345

A ton of cooling is equal to 12,000 British thermal unit (British Thermal Unit). Therefore, you will find it written on an air conditioner with one and a half tons: 18,000 Btu, and on a two-ton air conditioner, 24,000 Btu, and so on. We find in the model number a reference to that, so you find the number consisting of letters, followed by numbers such as 18, 24, and 12, so you know how many tons. From the model number.

Before you buy the air conditioner, first know your needs for the air conditioner:

The equation used is simply = length x width x height x 300...Then we divide the result by 12,000 Where 300 is a cooling unit for one square meter air conditioner, (12,000 units = one ton)

Example: The length is 8 metres, the width is 6 metres, and the height is 3 metres how much air conditioning do we need? Our need for units to air condition the room is 8 x 6 x 3 x 300 = 42300. Then we convert it to tons: Our need in tons for room air conditioning is 42,300 ÷ 12,000 = 3.6.. Therefore, depending on the output, I recommend installing a 3.75-ton or 4-ton air conditioner his calculation works at the maximum temperature of approximately 50 degrees Celsius.

Conclusion

We conclude that the civil engineer needs to know how to design and choose the appropriate diameter of the electrical wire or the appropriate size of the air conditioner so that he can make the appropriate decision regarding the electrical and mechanical details.

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A REVISED MECHANISM ALONG WITH AN ORGANIZATIONAL AND ECONOMIC STRUCTURE TO PROMOTE BUSINESS DEVELOPMENT IN THE STATE OF LIBYA

Ramadan Ahmed Atniesha (Ph.D. student)

Sukhoi State Technical University of Gomel, Gomel, Belarus

Scientific Supervisor –**Natalia V. Sychyova**

Ph.D., Associate Professor of the Sukhoi State Technical University of Gomel

Abstract: This report proposes a revised mechanism, accompanied by an organizational and economic structure, aimed at promoting business development in the State of Libya. In the aftermath

of political instability and economic challenges, Libya faces the urgent need to revitalize and diversify its economy. This report examines the existing barriers to business development in Libya and offers recommendations for overcoming these obstacles. It explores the importance of an effective mechanism that encompasses regulatory reforms, investment incentives, and support for entrepreneurship. Furthermore, it emphasizes the significance of establishing a robust organizational and economic structure to facilitate business growth and foster a conducive environment for local and foreign investment. By implementing these strategies, Libya can unlock its economic potential and pave the way for sustainable development.

Key words: business development, economic structure, organizational structure, Libya, regulatory reforms, investment incentives, entrepreneurship.

Introduction

The State of Libya has experienced political turmoil and economic challenges in recent years, necessitating a focused effort to promote business development and economic growth. This report presents a revised mechanism, accompanied by an organizational and economic structure, to facilitate the expansion and diversification of businesses in Libya. By addressing the existing barriers and fostering an enabling environment, Libya can attract investment, encourage entrepreneurship, and unlock its untapped economic potential.

Results and discussion

Several barriers hinder business development in Libya. These include bureaucratic hurdles, a lack of transparent regulations, limited access to financing, inadequate infrastructure, and a challenging security situation. Additionally, the absence of a comprehensive legal framework and weak governance structures contribute to the difficulties faced by businesses in the country. Addressing these barriers is crucial for creating a favorable business climate that encourages domestic and foreign investment [1].

To promote business development, a revised mechanism should be implemented in Libya. This mechanism should focus on regulatory reforms, streamlining bureaucratic processes, and fostering transparency. Establishing a one-stop-shop to facilitate business registration and licensing procedures can significantly reduce administrative burdens. Furthermore, enhancing legal frameworks that protect property rights, enforce contracts, and ensure fair competition is essential. Encouraging public-private partnerships and providing targeted support for entrepreneurship and innovation can also stimulate economic growth [2].

A robust organizational and economic structure is vital for sustainable business development in Libya. This structure should include the establishment of specialized agencies responsible for investment promotion, business support services, and the enforcement of regulations. These agencies can facilitate market entry, provide information and guidance to investors, and offer assistance to local businesses. Additionally, developing infrastructure, particularly transportation networks and reliable energy supplies, is crucial for attracting investments and facilitating business operations [3].

To attract domestic and foreign investment, Libya should consider offering various incentives. These may include tax breaks, investment protection guarantees, streamlined customs procedures, and simplified repatriation of profits. Furthermore, the promotion of economic diversification is essential to reduce dependence on oil revenues and create a resilient economy. Encouraging sectors such as tourism, agriculture, renewable energy, and manufacturing can contribute to sustainable development and job creation.

Conclusion

Promoting business development in Libya requires a comprehensive approach that addresses the existing barriers, implements regulatory reforms, and establishes an effective organizational and economic structure. By streamlining bureaucratic procedures, enhancing transparency, and providing support for entrepreneurship, Libya can create an attractive business environment. Investment incentives and economic diversification initiatives are crucial for attracting domestic and foreign investors and reducing dependence on oil revenues. The successful implementation of these strategies will contribute to sustainable economic growth, job creation, and

improved living standards for the people of Libya.

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REVOLUTIONIZING AIR TRAVEL: THE POTENTIAL OF BALL BEARING PROPULSION IN UNMANNED AERIAL VEHICLES

Ryan Nadar (student)

Ajeenkya DY Patil University, Lohegaon, Pune, Maharashtra, India

Scientific Supervisor – **Vijaya Kumar Varadarajan**

(Prof. Dr. Vijayakumar Varadarajan, EAI Fellow, Dean - International Division, Ajeenkya D Y Patil University, India,)

Abstract: Ball bearing has revolutionized the sectors of Aerospace Engineering, Marine Engineering, Automotive Engineering, and many others. The ball bearing's job is to reduce friction in mechanical rotations, such as using the motor. There is also interest in growing Rim Thrusters, which are hubless and aim to revolutionize the propulsion industry. In the design of ball bearing propulsion, its unique design from the electrical motor takes the shape of a ball bearing, which is more efficient than hubs as well as rim thrusters

Keywords: Unmanned Aerial Vehicle, Motor, Rim Thruster, Ball Bearing and Propulsion.

Introduction

The introduction of ball bearings has sparked a revolutionary wave in Aerospace, Marine, and Automotive Engineering, catalyzing significant progress and advancement within these sectors. By effectively reducing friction in mechanical rotations, particularly within motors, ball bearings have become an indispensable component of modern engineering. Concurrently, the emergence of Rim Thrusters, a novel innovation operating autonomously from hubs, has generated considerable interest, poised to transform the propulsion industry.In the realm of ball bearing propulsion, its unique design, inspired by electrical motors, offers a more efficient alternative to traditional hubs and rim thrusters. This innovative concept not only aims to redefine propulsion technology but also has the potential to function as an electrical generator. Consequently, the sphere of ball bearing propulsion seeks to revolutionize the dynamics of aerospace, automotive, and marine engineering, signaling an imminent paradigm shift within these crucial sectors. As these advancements continue to progress, the interaction between ball bearings and rim thrusters is expected to pioneer new frontiers for improved efficiency and performance in engineering applications.

Results and discussion

The hubless rim thruster represents a cutting-edge propulsion system primarily utilized in marine applications, with ongoing exploration for its potential integration into aircraft propulsion. However, significant hurdles persist in harnessing the full capabilities of this technology. The primary challenge lies in addressing the bearing and air-gap dilemma. In conventional motors, maintaining a precise air gap, typically ranging between 0.5-1 mm, is crucial for optimal performance. However, this narrow tolerance poses a dilemma for rim thrusters, as a traditional central bearing system with a large diameter would leave excessive rotor material vulnerable to deformation. Unlike conventional fan designs, which rely on a centerline shaft for rotational motion, rim-driven thrusters employ a mechanism situated at their outer radius to induce rotation in the fan. This innovative configuration eliminates the necessity for a central hub, thus enabling an uninterrupted flow of fluid through the core of the fan. Our study introduces a rim-driven thruster propelled by the interaction of electric and magnetic fields, akin to brushless motor technology,