

# Redesigning the capital budgeting process to support large firm growth: a case for the entrepreneurial mindset

A case for the entrepreneurial mindset

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## Abstract

**Purpose** – This paper aims to argue that important elements in the capital budgeting process are either undervalued or not considered and are a significant reason for both low and slow growth in large firms. Adopting an entrepreneurial mindset in conjunction with a portfolio approach based on different types of innovation to allow for growth projects to enter the process and be evaluated for possible selection are outlined as an alternative to strengthen the capital budgeting process.

**Design/methodology/approach** – Concepts and processes drawn from the finance, economics and entrepreneurship literature are used to form a proposed new approach to the capital budgeting process.

**Findings** – Only a handful of large firms even achieve returns more than their cost of capital. This manuscript argues that the reason for the lack of growth is a function of a capital budgeting process that does not allow the full spectrum of risk projects because of behavioral factors. This manuscript further proposes a portfolio approach that would allow for all projects to be fairly considered and aligned with stakeholder interests.

**Originality/value** – The current literature tends to focus on the financial evaluative aspect of the capital budgeting process. The void in the literature is with other aspects of the capital budgeting process both in terms of currency and in pursuing alternative explanations for the reasons the full risk spectrum of projects is not considered.

**Keywords** Capital budgeting, Large firm growth, Entrepreneurial mindset in firm growth

**Paper type** Research paper

## Introduction

Firm growth is always a topic of great importance to managers and investors alike. However, there are many definitions and ways to measure growth. For instance, firms can be considered growing if their asset base or their market share is expanding. However, these and many other growth metrics fall short of the most relevant measure of growth. The most relevant and meaningful measures of firm growth are value creation and value destruction.

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A classic finance definition of the purpose of a firm is to create long-term value for its investors. For firms to accomplish the mission of long-term value creation, their existing and future project portfolio must earn risk-adjusted returns that exceed the cost of capital. In other words, real growth emerges from a sound and effective capital budgeting process where existing and new projects are constantly evaluated for value creation using tools like Net Present Value.

The problem is that many established firms have experienced very low levels of growth in value creation as measured by returns in excess of their cost of capital. According to McKinsey and Company, seven out of eight SP 500 companies during the past decade achieved returns of less than 10% and 90% could not maintain growth rates consistent with GDP (McKinsey and Company, 2022, “*Mindset to Action*” *Imperatives for Growth*). This study also found that a full 25% of firms did not grow at all. Zook (2004) found that only 10% of firms achieved revenue and profit growth of just 5% and earned returns over their cost of capital. Also, Freeman *et al.* (2004) suggested when a firm’s core growth attains maturity, less than 5% of firms achieve growth rates of at least 1% above gross domestic product. These studies demonstrate that large firm growth has been an issue from a long time.

This failure of mature firms to achieve risk-adjusted returns above their cost of capital leads to vulnerability in maintaining any economic moat or competitive advantage which could lead to value destruction or value stagnation. Therefore, the choice of projects to maintain, delete and add to its asset portfolio is the key determinant of growth in a firm’s value. As such, our objective is to examine current best practices in capital budgeting and suggest ways to improve them for established firms to achieve improved rates of value creation. We propose that the capital budgeting process needs to be re-imagined incorporating an entrepreneurial mindset for growth and innovation.

## Literature review

### *Entrepreneurial mindset*

Adopting an entrepreneurial mindset involves fostering an environment of creativity and embracing calculated risk-taking by an individual or an organization. This can result in more innovative and efficient solutions, increased growth, profitability, and ultimately, a competitive advantage in the marketplace. Kuratko *et al.* (2021) argues that the literature delving into the entrepreneurial mindset is “something of a schizophrenia in understanding what distinguishes the entrepreneurial mindset.” As such, Kuratko *et al.* (2021) analyzed the literature for what distinguishes an entrepreneurial mindset. The authors found that the literature could be summarized into three lines of research. The three critical perspectives that stand out as essential for consideration: Cognitive aspect, Behavioral aspect and Emotional aspect. The authors suggested scholars consider the cognitive, behavioral, and emotional aspects of an entrepreneurial mindset as unique and as important in a different way. Furthermore, the authors argue that the three areas must be considered collectively and that they reinforce and inform each other. It seems clear that a comprehensive examination of the entrepreneurial mindset must incorporate all three components.

The cognitive aspect of the entrepreneurial mindset focuses on how one thinks critically, analyzes information, and makes decisions. Under the umbrella of cognitive aspects, Mitchell *et al.* (2002) offered a standout definition of entrepreneurial cognition, bridging the connection between the cognitive process and entrepreneurship. They portrayed it as the mental models that individuals use when making evaluations, decisions, or judgments about the evaluation of business opportunities and the pursuit of growth (Kuratko *et al.*, 2021). Hurst (2019) found that entrepreneurial cognition is an interdisciplinary field of study that draws on insights from psychology and management literature to understand how entrepreneurs think and make

decisions. Research in this area focuses on topics such as opportunity recognition, decision-making, risk-taking, creativity, and innovation. With an entrepreneurial mindset, mental cognition is important when it comes to innovation and opportunity recognition. [Shane and Venkataraman \(2000\)](#) have indicated that the recognition of an opportunity is primarily driven by two key factors – the availability of prior industry information that enables its identification and the cognitive abilities to accurately assess its value. Cognitively these two elements play a crucial role in determining the successful discovery of a particular opportunity when bringing in new products or services to the market. Prior market knowledge can enable individuals to assess the viability of potential market opportunities quickly and efficiently by making informed decisions that result in effective use of time and resources. Additionally, having prior knowledge can help identify trends and changes in particular markets, giving individuals a competitive advantage when identifying these opportunities. Managers or CEOs can use their prior knowledge as a valuable asset, fully composed of valid market intelligence [Glick et al. \(1990\)](#). Previous knowledge is what allows them to make these informed decisions, strategically navigate the market, and stay ahead of industry trends, ultimately contributing to the overall success of the company.

Another factor that aligns with the cognitive aspect behind an entrepreneurial mindset when recognizing a market opportunity is how one's cognitive properties value an opportunity [Shane and Venkataraman \(2000\)](#). The philosophical term axiology, the study of value, and opportunity recognition are closely interconnected because axiology helps to determine what is considered a valuable opportunity to an individual [Hurst \(2019\)](#). When individuals have a keen sense of their values, they are better able to identify opportunities that align with those values. These cognitive aspects are particularly important and play a leading role for individuals when exploiting an opportunity. Before deciding on an opportunity, one will have to weigh the risks and benefits. If a manager is more risk-averse, and the risk outweighs the benefits from the overall value of an opportunity, the manager will pass and seek a more valuable opportunity. Within the mind, a manager's knowledge and what they may consider valuable have a crucial role when making business decisions for the firm. These behaviors are consistent with the seminal work of [Kahneman and Tversky \(1979\)](#) on how individuals can make different decisions on the same issue.

When it comes to managers taking risks, seeking innovation, and identifying growth opportunities, the Cognitive aspect is especially important, but it cannot work alone. Rather, it is intricately connected to the Behavioral and Emotional aspects which are highly influenced by uncertainty. These three perspectives work together to facilitate success in a rapidly changing market. How one behaves is strongly correlated with how one thinks. The fulfillment of one's actions with an entrepreneurial mindset is closely tied to the Behavioral aspect. In other words, following through with one's thoughts and ideas is an essential component of achieving success as an entrepreneur and as a manager. Based on one's entrepreneurial actions, [Alvarez and Barney \(2006\)](#) developed a theory called creation theory. The creation theory is more focused on acting or creating an opportunity. This is when uncertainty comes into play and affects the behavioral aspect of a manager's entrepreneurial mindset. Uncertainty in this context makes it unlikely that any potential competing manager will know more about an opportunity or will be able to collect information more effectively about an opportunity than another manager ([Alvarez and Barney, 2006](#)). While numerous CEOs possess comparable skills and industry expertise, the factor that can determine the success or failure of a company often boils down to whether they act or not. Failing to act can be the turning point that results in missed innovations and years of potential growth.

As humans, our emotions have the power to influence the actions we perform, leading us down paths that can either be beneficial or detrimental. The Emotional Aspect is the last

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perspective behind an entrepreneurial mindset that is crucial for a manager when taking on risks, executing opportunities, and making decisions. Uncertainty plays a significant role in driving the emotions of a manager because it involves taking risks and venturing into the unknown (Kuratko *et al.*, 2021). When seeking to develop a new product or service in an existing market, there is no guarantee of success. Managers must navigate an uncertain and unpredictable environment, and this uncertainty can generate a range of emotions, from fear, stress and anxiety to even excitement, happiness and anticipation. Therefore, all managers need to control these emotions when making any critical business decisions. When an organization or more specifically, managers prioritize the continuous improvement of cognitive, behavioral, and emotional aspects, in a dynamically changing and highly competitive market, they position themselves for success and enhance their overall competitiveness and performance. Through the utilization of an entrepreneurial mindset, there is a possibility to drive innovation and create a better future Kuratko *et al.* (2021). For many years, millions of companies have wondered why their growth is falling as time progresses within the organization. This could be due to not only the lack or loss of an entrepreneurial mindset within managers but also the absence of the four stages used within an efficient capital budgeting model.

#### *Capital budgeting process*

The extant literature on capital budgeting can largely be broken down into a four-stage model outlined by Mukherjee *et al.* (2016) and Burns and Walker (2009). This model consists of the identification of an investment opportunity, development of an idea into a proposal, project selection and control through postaudit. Many studies have adopted the same terminology for these four stages to this day. Singh *et al.* (2012) states that many of the tools used for capital budgeting have not seen many changes in traditional thinking, but rather a rise in its use by managers over time. Many organizations still rely heavily on traditional techniques such as discounted cash flow models, and the weighted average cost of capital because of their effectiveness. Absent from this literature within the capital budgeting process is the perceived lack of an entrepreneurial mindset. The mindset of entrepreneurs tends to mimic that of managers over time. Instead of finding and funding new innovative projects and ventures that provide greater growth opportunities, they spend more time, money, and effort to reduce costs, minimize risk and penetrate their current markets (*Disruptive Innovation*, Christensen, 2012). Burns and Walker (2009) found a bottom-up approach to identification is commonly used and that very little research has been done on project approval during the past two decades.

The primary focus of research on capital budgeting is on investment appraisal techniques, risk assessment, and cost of capital calculation (Batra and Verma, 2014). Multiple studies have shown that the WACC is the most widely accepted and prevalent discount rate used by management and financial professionals (Anand, 2002; Irala, 2006). Brotherson *et al.* (2013) based on conversations with practitioners found that:

- discounted Cash Flow (DCF) is the dominant investment evaluation technique;
- WACC is the dominant discount rate used in DCF analyses; and
- (CAPM) is the dominant model for estimating the cost of equity The authors also found that corporations elect not to adjust discount rates for risk differences among individual projects.

As organizations strive to improve their risk management practices, they are increasingly turning to more sophisticated techniques such as sensitivity analyses and scenario analyses. These advanced methods offer greater accuracy and adjustability for risk than traditional

approaches (Singh *et al.*, 2012). According to a survey conducted by Graham and Harvey (2001), it was observed that larger companies tend to rely on risk-adjusted discount rates, whereas smaller firms show a preference for using Monte Carlo simulation for adjusting risk. There has also been an increase in the usage of newer techniques of real options, which include options to expand, abandon, wait, contract, and redeploy to increase the likelihood of success and limit the waste of resources involved in projects (Bennouna *et al.*, 2010; Singh *et al.*, 2012).

However, the underperformance of many corporations' growth should not be attributable to faulty capital budgeting tools, but rather to management's lack of an entrepreneurial mindset and an ability to compete against non-consumption. Managers are too focused on loss aversion that they are not willing to allocate the capital budget to riskier projects that are important for sustaining long-term growth. The current capital budgeting tools allow for new procedures utilizing the Ansoff Matrix to segment parts of the corporation to allow for greater growth opportunities.

### **The Ansoff matrix**

Ansoff (1957) introduced a strategic tool that is commonly used in the business world to identify growth opportunities for a company. However, it is glaringly absent and not explicitly mentioned in the capital budgeting literature.

We propose that this tool be used by management in the identification state of the capital budgeting process as a starting point to make sure a mixture of different risk/return and growth opportunities enter the process. The matrix focuses on four strategies that a company can use to grow its business (Ansoff Matrix, 2022). The Ansoff Matrix is a two-by-two matrix consisting of new and existing markets in one dimension and new and existing products in the other. The product dimension refers to the type of product that a company offers, while the market dimension refers to the type of market in which the company operates. The four strategies that are outlined in the matrix are market penetration, market development, product development and diversification.

Market penetration is a strategy that involves increasing sales of existing products in existing markets. This can be achieved by increasing the company's market share, lowering prices or increasing advertising and promotion. Market development, on the other hand, involves introducing existing products to new markets. This can be achieved by expanding the company's geographic reach, targeting new customer segments, or using different distribution channels. Product development is a strategy that involves developing new products for existing markets. This can be achieved by improving existing products or by introducing new products that complement the company's existing product line. Finally, diversification is a strategy that involves developing new products for new markets. This can be achieved by entering into new industries or by targeting new customer segments.

Currently, according to Christensen (2016) managers appear to be mainly focused on only two of the four strategies, market penetration, and market development, as they are the least risky to the corporation as well as for the manager's continuing employment. Also, the author states that managers have justification for selecting these low growth projects due to the evaluative tools used in the capital budgeting process that favors low risk quick payoffs. Understanding this propensity to select low growth projects is a big step in changing the process.

Our proposal is intended to set up a system that effectively utilizes all four strategies with the goal of consistent long-term firm growth. In order to accomplish this, we need to introduce the entrepreneurial take on the Ansoff matrix posited by Clayton Christensen (2016).

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### **Proposed changes to the capital budgeting process**

As stated in the literature review, mature companies tend to focus mainly on the existing products in existing markets, and existing products in new markets, disregarding the new products half of the matrix. This tendency can lead to stagnation in growth and an inability to capitalize on emerging market opportunities. Therefore, businesses must break down capital budgeting into four separate segments using the Ansoff matrix to ensure a more balanced approach to capital budgeting decisions.

One of the main reasons for this lack of focus on new products is the lack of an entrepreneurial mindset within management in mature firms as outlined in the literature review. Managers tend to be risk-averse and reluctant to invest in unproven products or markets. However, this mindset is limiting the potential growth of the firm. Therefore, it is essential to create separate capital budgeting project divisions into the four segments of the Ansoff matrix. Otherwise, many managers will ignore relevant projects in all Ansoff Matrix segments, and this can lead to decisions to cut the costs of research and development to improve their margins. This is the issue most mature firms face and is part of the cause of slow growth.

The proposed plan involves a three-step process (refer the following list).

*Proposed Change to the Capital Budgeting Process:*

- (1) Step 1
  - Map firms' existing markets and product into the Ansoff Matrix;
  - Mapping allows managers to determine areas of over and under investment;
- (2) Step 2
  - Identify new products that fit strategically;
  - Identify new products for nonconsumers that fit the firm's strategy;
- (3) Step 3
  - Allocate resources to all segments of the Ansoff matrix that fits the firms' desired risk/return profile; and
  - Make sure culture, governance and support systems are in place for this diversification approach to resource allocation.

*Source:* Created by authors

The first step involves identifying the company's existing products and markets and mapping them onto the Ansoff matrix. This step involves analyzing the company's current product offerings, and the markets in which it operates, and categorizing each product/market combination as either market penetration, product development, market development or diversification.

By mapping its existing products and markets onto the Ansoff matrix, the company can gain a better understanding of its growth opportunities and potential risks. This analysis can also help the company identify areas where it may be underinvesting or overinvesting and adjust its strategy accordingly.

The second step involves identifying potential new products. To achieve this, companies must adopt an entrepreneurial mindset that emphasizes risk-taking and innovation. This mindset is critical because it enables managers to identify new opportunities and think creatively about the relevant sections of the matrix. To ensure each section is given the proper attention, we propose the creation of four separate teams, each focusing on a specific section of the matrix. These teams would consist of industry experts with specialized talents in that market segment, allowing them to generate new product ideas that align with the company's strategic goals.

An entrepreneurial mindset encourages managers to pursue disruptive innovations that can transform the market, rather than focusing on incremental improvements to existing products. By adopting this mindset and taking calculated risks, companies can develop new

technologies or business models that disrupt the market and create new growth opportunities. By dedicating specialized teams to each section of the matrix, companies can ensure that all areas are given equal attention, and new products are developed strategically and thoughtfully.

Disruptive innovation is a term coined by Clayton Christensen to describe innovations in which a new product or service initially disrupts an existing market by providing a simpler, cheaper or more convenient solution to a problem. (*Disruptive Innovation, Christensen, 2012*). Disruptive innovations are often simpler and cheaper than existing products, making them accessible to nonconsumers or those who cannot afford existing products. The key idea behind disruptive innovation is that mature companies often focus too much on improving their existing products or services, which leads them to overlook emerging markets and customers with different needs. Disruptive innovation is closely tied to an entrepreneurial mindset, as it requires managers to identify and capitalize on emerging markets and customer needs. The entrepreneurial mindset can help companies leverage Clayton Christensen's model of disruptive innovation by encouraging them to seek out new markets and develop disruptive technologies or business models that can create new growth opportunities. Secondly, the concept of disruptive innovation is closely tied to an entrepreneurial mindset, as both require a willingness to take risks, pursue opportunities, and innovate to create new value for customers and grow a successful business.

Connecting the Ansoff matrix, Clayton Christensen's (2012) model of disruptive innovation, and the entrepreneurial mindset, we can view diversification in the Ansoff matrix as similar to disruptive innovation, where companies create new markets by introducing new products or services that appeal to nonconsumers or underserved segments. In both cases, companies are taking risks and venturing into uncharted territories. By embracing an entrepreneurial mindset, companies can be more open to taking these risks and pursuing disruptive innovation.

Another way to connect the two models is to view the market development strategy in the Ansoff matrix to Christensen's concept of low-end disruption. Market development involves selling existing products to new markets, which is similar to low-end disruption where companies create new markets by introducing lower-cost, lower-performing products that appeal to nonconsumers or underserved segments. In both cases, the company is expanding its reach by targeting new customers or markets.

Similarly, the product development strategy in the Ansoff matrix can be connected to Christensen's concept of sustaining innovation, where companies improve existing products to better serve existing customers. By embracing an entrepreneurial mindset, companies can become more agile and better able to identify and respond to new market opportunities and changing customer needs.

Finally, the market penetration strategy in the Ansoff matrix can be connected to sustaining innovation, where companies improve existing products or services to better serve existing customers. By embracing an entrepreneurial mindset, companies can encourage a culture of innovation and experimentation, leading to better products and services and ultimately driving growth.

Competing against nonconsumption is another aspect of the entrepreneurial mindset that can drive growth. Nonconsumption refers to people or organizations that are not currently using a product or service but could benefit from it. For example, many people in developing countries do not have access to traditional banking services, creating an opportunity for companies to offer mobile banking solutions.

By competing against nonconsumption, companies can create new markets and drive growth. This approach requires companies to identify unmet needs and develop products or

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services that meet those needs. These products or services may be different from existing offerings, requiring a mindset that emphasizes innovation and risk-taking.

Finally, the third step involves allocating resources to the different segments of the Ansoff matrix based on the company's goals and objectives. For a mature firm, this step is particularly critical because the company's resources are likely limited, and there will most likely be pressure on managers to prioritize existing products and markets.

To allocate resources effectively, a mature firm must first identify its goals and objectives. These goals and objectives may include increasing market share, expanding into new markets, developing new products or achieving a certain level of profitability. Once these goals and objectives have been identified, the firm can then allocate resources to the different segments of the Ansoff matrix based on their potential for achieving these goals.

For a mature firm, it is essential to balance the risk and potential rewards of each segment of the Ansoff matrix. Investing in existing products and markets may be less risky but may also have limited growth potential. Investing in new products and markets may be riskier but may also have higher growth potential. A mature firm may also need to consider the potential impact of investing in new products or markets on its existing operations.

To allocate resources effectively, a mature firm may need to adopt a portfolio approach, similar to the way investors balance risk and reward by diversifying their investments. This approach involves investing in a mix of existing products and markets, and new products and markets to balance risk and reward.

Another critical aspect of the third step for a mature firm is to ensure that the company's culture and management structure support innovation and risk-taking. Mature firms can be resistant to change and may have a hierarchical management structure that discourages risk-taking. To allocate resources effectively to the different segments of the Ansoff matrix, the firm may need to create a culture that supports innovation and risk-taking, and a management structure that enables managers to pursue new opportunities.

By breaking down operations into the four segments of the Ansoff matrix, companies can ensure a more balanced approach to capital budgeting decisions. This approach will encourage managers to invest in new products and markets, leading to higher growth potential for the company.

The Ansoff matrix is a powerful tool for businesses to make capital budgeting decisions. However, companies must break down their operations into the four segments of the matrix to ensure a balanced approach to investment decisions. The lack of an entrepreneurial mindset within management in mature firms is a significant contributing factor for the slowing growth. Still, with the proposed plan, companies can allocate resources effectively, leading to higher growth potential and better long-term success.

### **Conclusion/recommendations**

In conclusion, this paper discusses the importance of utilizing the Ansoff matrix in capital budgeting decisions and how companies can break down their operations into four separate capital budgeting segments to drive growth. The paper also notes the lack of an entrepreneurial mindset within mature firms, which can contribute to slower growth rates.

We have proposed a plan for businesses to utilize the Ansoff matrix, Clayton Christensen's model of disruptive innovation, and the entrepreneurial mindset to identify and prioritize growth opportunities. By embracing an entrepreneurial mindset and taking risks, companies can create new markets and drive growth through diversification and disruptive innovation. By developing new technologies or business models, companies can appeal to nonconsumers or underserved segments, creating new growth opportunities.



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Moreover, companies can also leverage sustaining innovation and low-end disruption to improve existing products and services and expand their reach into new markets. By taking a comprehensive approach to growth opportunities, companies can balance risk and opportunity, positioning themselves for success in the long term.

According to Boutestka and Regaieg (2020), the evidence also suggests that the investor loss-aversion (Kahneman and Tversky, 1979) sentiment strongly and negatively affects economic performance in the US market. As such, the perceived risk for senior management in changing from the status quo needs to be addressed so firms may move forward with better growth opportunities. One method to reduce perceived risk for management in implementing the proposed change to the capital budgeting process may be accomplished by managing stakeholder expectations through corporate governance avenues. Specifically, formally announcing to all stakeholders, with full transparency, how and why the new capital project initiatives are to be introduced and implemented with their anticipated impact on the risk-return relationship of the firm. Stakeholders not interested in increasing growth through the new process will sell and be replaced by new shareholders wanting higher potential growth and better ways to compete and defend current positions. Successful growth in firm value will also lead to increased rewards for managers and stakeholders.

In summary, companies should use the Ansoff matrix, Clayton Christensen's model of disruptive innovation and the entrepreneurial mindset as a framework for driving growth. By embracing these concepts, companies can become more agile, responsive and innovative, leading to higher growth rates and a competitive advantage in the marketplace.

## References

- Alvarez, S. and Barney, J.B. (2006), "Discovery and creation: alternative theories of entrepreneurial action", *Strategic Entrepreneurship Journal*, Vol. 3 No. 6, pp. 11-26.
- Anand, M. (2002), "Corporate finance practices in India: a survey", *Vikalpa: The Journal for Decision Makers*, Vol. 27 No. 4, pp. 29-56.
- Ansoff matrix (2022), "Corporate finance institute", available at: [www.corporatefinanceinstitute.com/resources/management/ansoff-matrix/](http://www.corporatefinanceinstitute.com/resources/management/ansoff-matrix/) (accessed 24 February 2023).
- Ansoff, H.I. (1957), "Strategies for diversification", *Harvard Business Review*, Vol. 35 No. 5, pp. 113-124.
- Batra, R. and Verma, S. (2014), "An empirical insight into different stages of capital budgeting", *Global Business Review*, Vol. 15 No. 2, pp. 339-362, doi: [10.1177/0972150914523588](https://doi.org/10.1177/0972150914523588).
- Bennouna, K., Meredith, G.G. and Marchant, T. (2010), "Improved capital budgeting decision making: evidence from Canada", *Management Decision*, Vol. 48 No. 2, pp. 225-247.
- Boutestka, A. and Regaieg, B. (2020), "Loss aversion, overconfidence of investors and their impact on market performance evidence from the US stock markets", *Journal of Economics, Finance and Administrative Science*, Vol. 25 No. 50, pp. 451-478.
- Brotherson, W.T., Eades, K.M., Harris, R.S. and Higgins, R.C. (2013), "Best practices in estimating the cost of capital: an update", *Journal of Applied Finance*, Vol. 23 No. 1, pp. 15-33.
- Burns, R.M. and Walker, J. (2009), "Capital budgeting surveys: the future is now", *Journal of Applied Finance*, Vol. 19 No. 1, pp. 78-90.
- Christensen, C. (2012), "Disruptive innovation", available at: [www.claytonchristensen.com/key-concepts/](http://www.claytonchristensen.com/key-concepts/) (accessed 31 March 2023).
- Christensen, C. (2016), "Where does growth come from?", available at: [www.youtube.com/watch?v=rHdS\\_4GsKmg](https://www.youtube.com/watch?v=rHdS_4GsKmg) (accessed 12 June 2024).
- Freeman, K.W., Nolen, G., Tyson, J., Lewis, K.D., Greifeld, R. and Gulati, R. (2004), "How CEOs manage growth agendas", *Harvard Business Review*, Vol. 82 Nos 7/8, pp. 124-189.

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- Glick, W.H., Huber, G.P., Miller, C.C., Doty, D.H. and Sutcliffe, K.M. (1990), "Studying changes in organizational design and effectiveness: retrospective event histories and periodic assessments", *Organization Science*, Vol. 1 No. 3, pp. 293-312.
- Graham, J.R. and Harvey, C.R. (2001), "How do CFOs make capital budgeting and capital structure decisions?", *Journal of Applied Corporate Finance*, Vol. 15 No. 1, pp. 8-23.
- Hurst, C.G. (2019), "An axiological measure of entrepreneurial cognition", *International Journal of Entrepreneurial Behavior and Research*, Vol. 25 No. 2, pp. 394-412.
- Irala, L.R. (2006), "Financial management practices in India", *Fortune Journal of International Management*, Vol. 3 No. 2, p. 9.
- Kahneman, D. and Tversky, A. (1979), "Prospect theory: an analysis of decision under risk", *Econometrica*, Vol. 47 No. 2, pp. 263-291.
- Kuratko, D.F., Fisher, G. and Audretsch, D.B. (2021), "Unraveling the entrepreneurial mindset", *Small Business Economics*, Vol. 57 No. 4, pp. 1681-1691.
- McKinsey and Company (2022), "Mindset to action: imperatives for growth", available at: [mindset-to-action-imperatives-for-growth.pdf](https://www.mckinsey.com/mindset-to-action-imperatives-for-growth.pdf) (mckinsey.com) (accessed 29 April 2024).
- Mitchell, R.K., Smith, J.B., Morse, E.A., Seawright, K.W., Peredo, A.M. and McKenzie, B. (2002), "Are entrepreneurial cognitions universal? Assessing entrepreneurial cognitions across cultures", *Entrepreneurship Theory and Practice*, Vol. 26 No. 4, pp. 9-33.
- Mukherjee, T., Al Rahahleh, N. and Lane, W. (2016), "The capital budgeting process of healthcare organizations: a review of surveys", *Journal of Healthcare Management*, Vol. 61 No. 1, pp. 58-77.
- Shane, S. and Venkataraman, S. (2000), "The promise of entrepreneurship as a field of research", *Academy of Management Review*, Vol. 25 No. 1, pp. 217-226.
- Singh, S., Jain, P.K. and Yadav Surendra, S. (2012), "Capital budgeting decisions: evidence from India", *Journal of Advances in Management Research*, Vol. 9 No. 1, pp. 96-112.
- Zook, C. (2004), *Beyond the Core: Expand Your Market without Abandoning Your Roots*, Harvard Business School Press.

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