



Financial Management

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Intel Corporation: A Brief History and Recent Events (2020-2024)

(Part A)

History and Overview

Intel company was founded in 1968 (July 18th) by Rob Noyce and Gordon E. Moore (Gargini, P.A., 2017). At the outset, it was located in Mountain View, a city in California. The brainchild of the company was its appetite for technological innovation in the semiconductor industry. Besides Noyce and Moore, who came up with the first integrated circuits concept, the role of Andrew Grove, who left his position at Fairchild Semiconductor to co-found Intel, in driving the company's initial growth and success is one of the greatest contributions (Lécuyer, C., 2022).

When Intel delivered the world's first commercially available 4004 microprocessor in 1971, it was a breakthrough that established Intel as a company trusted by the industry (Zaletov, I., 2022). This could be regarded as the stage where the information era truly began and this also demonstrated Intel's ability in microprocessor technology. Following that, the company set important standards with the Intel 8008 and 8080 microprocessors, a quality that made them the leader in the semiconductor industry.

The 1980s and 1990s saw Intel taking its innovation and development quality to the next level with a range of ongoing releases of microprocessor chips including the Intel 386, Intel 486, and Pentium processors (Harnish, V., 2021). This technological breakthrough not only triggered the bloom of personal computing and established Intel as the number one choice for microprocessor supplies of PCs worldwide but also made it mainstream among visitors.

Its Intel mission exceeded in the consumer market when the company achieved high-end processors for servers, workstations and networking components. The Intel Xeon processor line, which appeared at the end of the confounding nineties, became mainstream for data centre and cloud computing software (Khan, F.H., 2021). Therefore, Intel's position in the semiconductor market was solidifying day by day.

At the beginning of the 21st century, Intel faced vigorous rivals in the microelectronics industry, and semiconductor businesses, particularly in mobile and “things” devices (Yeung, H.W.C.,

2022). To deal with those difficulties the corporation initiated a strategic transformation with its aim being diversification of the product portfolio and investment into emerging technologies like AI, autonomous driving, and IoT. To the challenges mentioned the firm initiated a strategic transformation. The purpose behind this transformation was the diversification of the company's product portfolio and also investments in emerging technologies such as AI, autonomous driving, and the Internet of Things (IoT).

Today, Intel plays the leading role in the innovation which is mainly the building and the formulation of the semiconductors that represent the main raw technology for the era of computing. The company encompasses the world of clients and data centres using its huge product range, which also covers the Internet of Things and connectivity solutions. Intel, a global company, has over 110,000 people as employees and it is presently in more than 60 countries. Perhaps, it remains the beacon of light in semiconductor designing, manufacturing, and technology leadership.

Industry and Business Model

Intel Corporation does business in an area known as semiconductors, which is a keystone industry, that supports such things as computing, telecommunication, and the auto industry in addition to many others. As the primary participant in the semiconductor industry, the essence of Intel's core business model involves the designing and production of semiconductor chips (OLIVIERI, F., 2020). These chips are a mixed bag of components, the most important of which is microprocessors, also called CPUs, which function as the brains of computers and in most electronic gadgets. Besides, however, Intel caters for integrated graphics solutions, chipsets, memory and other similar semiconductor products as well (Zeng, G., 2017). The company's innovations, from the economics and manufacturing processes used in the creation of these chips, are what drive the company and enable it to produce top-performing, green products, which power most of the devices we use today.

Marketplace and Major Competitors

Intel is operating in the cutthroat market, which is so hard and has competent contestants in the semiconductor industry. Its primary competitors include:

Advanced Micro Device (AMD): AMD is a notable competitor to Intel that handles microprocessors, graphics cards and other similar technologies. The Intel vs. AMD competition for so long has been the distinguishing feature of the semiconductor industry and both of the companies are on the same plane regarding several segments of the business (Božić, D., 2021).

NVIDIA Corporation: NVIDIA is known for its custom integrated circuits and machine learning-based systems. While not competing in CPU personally, NVIDIA's GPUs seem to appear in CPU working stations, gaming computers, and data centres together with Intel's CPUs are the main competitors (Teske, D., 2018).

Qualcomm: Qualcomm is a dominant player in the mobile communication technologies market, as the company designs processors, modems, and device connectivity products at a high level. Qualcomm is primarily a modem/chipset supplier focused on mobile devices but its recent diversification into other segments like automotive and IoT potentially neutralize Intel (Floriano, S., 2018).

Samsung Electronics: Samsung is a key player in this market, capable of making a wide range of chips including those for consumer electronics, memory devices and so on (Hidiroglu, D., 2021). Samsung has its competitor's edge in its production process and diversified product categories and does business with Intel in multiple segments.

Taiwan Semiconductor Manufacturing Company (TSMC): The Taiwan Semiconductor Manufacturing Company, or TSMC, is the number one contract semiconductor manufacturer worldwide, as it primarily produces chips for various clients, with Intel's competitors among them (Richard, C., 2022). TSMC being a main supplier to many of the semiconductor companies not only Intel is facing very difficult competition as threats from TSMC. TSMC's technology advancement and manufacturing capacity have become a big challenge for the leading company in the industry.

Major Events (2020-2024).

Indeed, in 2020, the semiconductor giant, Intel, experienced radical changes in company leadership and battled production-related hiccups. In January, the business announced that it was promoting Bob Swan to the post of CEO, instead of Brian Krzanich (Lazonick, W., 2021). This, therefore, led to a change in the leadership which was a major turning point for Intel as it

adopted a new methodology to achieve its goal of successfully manoeuvring through an ever-changing technological scene. But beyond that, Intel saw some challenges while moving to the 7nm technology in chip manufacture, and that raised a couple of eyebrows among investors and clients (DiLorenzo, C.D., 2021).

Towards the end of 2020, Intel carried the torch forward by relying on mergers and acquisitions and innovative technologies. The company announced its success regarding semiconductor technology, claiming that it has patents and discretions in AI and quantum computing technology. On the other hand, Intel acquired Moovit, a mobility-as-a-service (MaaS) solutions provider, at the end of August (Martins, J.D.F., 2023), demonstrating its dedication to creating services for autonomous driving and transportation.

Nevertheless, by 2022 Intel involved itself in controversial lawsuits with competitors tied to accusations of trademarks and antitrust violations (Dogan, S., 2016). As a result, these legal challenges gave someone else an opportunity to look into the business operations ratcheting the complexities level of masking Intel business operations at another level. Despite these things, Intel intended these barriers for technological giants through strategic agreements on the front edge technologies, such as 5G, Artificial Intelligence and edge computing.

In 2023, Intel was caught up in several financial storms and had to report its profits had fallen due to supply chain problems and some products were not selling as fast as they normally did (van der Walt, A., 2022). Such a move decreased the shares' price, which in turn made the company think twice and look into the operations and core business strategy more closely. Alongside this re-evaluation, the company is set to divest some of its non-core business areas and thus de-complex operations, focusing on its semiconductor designing core competence.

In June 2024 another dramatic development took place for Intel when the outgoing CEO – Bob Swan – resigned. This action sparked a business decision on the part of the company to identify a new CEO to captain the ship afresh, which included resolving the crises and unlocking opportunities for the future. At the same time, however, Intel made further inroads into the field of mergers and acquisitions by purchasing smaller semiconductor companies to grow its technology portfolio while maintaining a competitive edge in these particular segments.

Calculation of Financial Ratios (Part B)

Ratios	Calculation
Net Profit Margin = (Net Income / Net Revenue) x 100	= (1,675 million / 54,228 million) x 100 = 3.09 %
Acid-Test Ratio = (Current Assets - Inventories) / Current Liabilities	= (43,269 million – 11,127 million) / 28,053 million = 32,142 million / 28,053 million = 1.14
Net Gearing Ratio = (Debt - Cash and Cash Equivalents) / (Total Equity + Non-controlling Interests)	= (46,978 million – 7,079 million) / 114,340 million = 39,899 million / \$114,340 million = 0.35
Asset Turnover Ratio = Net Revenue / Average Total Assets	= 54,228 million / 186,837.5 million = 0.29

Critical Evaluation of Financial Ratios:

Net Profit Margin

The net profit margin exemplifies the profitability of a company or business by expressing the net income as a percentage of net revenue (Alexandru, C.G., 2019). Regarding the company data, the net profit margin is 3.09%. It shows that the business is earning more from every unit of the product by keeping its operational costs in check. It proves its efficiency in managing expenditures. For Intel, the net profit margin of 3.09% shows that the company makes only a small profit concerning its absolute income. Hence, Intel's profit per sale may not be as impressive compared to the one of software or digital solution firms.

Acid-Test Ratio

The acid-test ratio is the technically named quick ratio, and this is a measurement of a company's capability to meet short-term obligations using its most liquid assets. It does not count

inventories any more, as a result, it obtains a more conservative version of liquidity (Vásquez Villanueva, C.A., 2021). Having an acid-test ratio of 1.14, near enough looks fine with Intel's liquidity indicators. In most cases, this is referred to as a current ratio of 1/1 or 1 time, which means that Intel satisfies its short-term obligations making use only of the money coming from the inventory. Even though this measure is important to take into account, entrepreneurs should keep an eye on trends over time and ratios with other businesses to maintain financial stability.

Net Gearing Ratio

The loan-to-value ratio gauges to what extent a company's business is managed by debt as opposed to the money of its owners, the equity. The figures below 10% indicate a lower risk of being overly dependent on debt financing while the figures beyond this range mean greater financial leverage (Mota, A., 2017). The net gearing ratio of 0.35 implies that Intel is in a position to pay its debt obligations in time with debt sources subordinating to equity financing. This shows less financial risk, also it is making the company stable by reducing the debt, which, when it is high, is the factor that multiplies the effect of recession or fluctuations in interest rates. Nevertheless, Intel should keep debt-to-equity financing in concordance to maximize its cost of capital before shareholders get their positive valuation.

Asset Turnover Ratio

The asset turnover ratio evaluates a company's capability of using its assets productively to bring more revenue. A higher ratio is indicative of a more impactful use of assets as well as a better performance on the production side (Patin, J.C., 2020). A proper look at Intel's asset turnover ratio (0.29) would signal the possible existence of problems that may make it unprofitable to convert its assets into revenue. Academic evidence demonstrates that a lower asset turnover ratio is generally observed amongst technology companies because the operations for such organizations are capital intensive, which heavily targets research and development together with facility manufacturing. Nonetheless, it is highly important for Intel to constantly watch its asset utilization for purposes of identifying areas which are better and looking to improve on efficiency to maintain its profitability and competitiveness.

Comparison with a Global Competitor

Ratios	Intel	AMD
Net Profit Margin = (Net Income / Net Revenue) x 100	$= (1,675 \text{ million} / 54,228 \text{ million}) \times 100$ $= 3.09 \%$	$= (854 \text{ million} / 22,680 \text{ million}) \times 100$ $= 3.76\%$
Acid-Test Ratio = (Current Assets - Inventories) / Current Liabilities	$= (43,269 \text{ million} - 11,127 \text{ million}) / 28,053 \text{ million}$ $= 32,142 \text{ million} / 28,053 \text{ million}$ $= 1.14$	$= (3.7 \text{ billion} - 1.4 \text{ billion}) / 1.477 \text{ billion}$ $= 2.3 \text{ billion} / 1.477 \text{ billion}$ $= 1.56$
Net Gearing Ratio = (Debt - Cash and Cash Equivalents) / (Total Equity + Non-controlling Interests)	$= (46,978 \text{ million} - 7,079 \text{ million}) / 114,340 \text{ million}$ $= 39,899 \text{ million} / \$114,340 \text{ million}$ $= 0.35$	$= (1.717 \text{ billion} - 3.933 \text{ billion}) / (55.892 \text{ billion} + 1.717 \text{ billion} - 3.933 \text{ billion})$ $= (-2.216 \text{ billion}) / 53.676 \text{ billion}$ $= -0.0413$
Asset Turnover Ratio = Net Revenue / Average Total Assets	$= 54,228 \text{ million} / 186,837.5 \text{ million}$ $= 0.29$	$= 22,680 \text{ million} / 67,732.5 \text{ million}$ $= 0.3349$

Net Profit Margin

- **Intel:** 3.09%
- **AMD:** 3.76%

Efficiency in Cost Management

A high net profit margin speaks of a proficient approach to cost management as well as efficiency in operations. AMD has a net profit margin of 3.76% compared to Intel which has a net profit margin of 3.09%. AMD, nonetheless, has shown a slightly greater ability in cost control and revenue generation than Intel. This implies that probably AMD has a competent plan of action to cut off costs or to streamline operations as well as on higher-margin product lines as Intel.

Competitive Positioning

AMD's higher net revenue mirrors its cutthroat situating in the semiconductor market. The organization's capacity to keep a higher edge is demonstrative of its progress in catching a piece of the pie, conveying creative items, or evaluating its contributions. Conversely, Intel's somewhat lower net revenue signals difficulties or tensions in its cutthroat scene, like expanded rivalry, valuing pressures, or higher creation costs.

Research and Development (R&D) Investments

Net income in like manner reflects the suitability of R&D interests in driving progression and product improvement. A higher edge recommends that AMD is productively changing its Research and development spending into beneficial items or administrations. Alternately, Intel's edge demonstrates the requirement for additional streamlining or prioritization of Research and development ventures to upgrade benefit and seriousness.

Market Dynamics and Business Model

Contrasts in strategies and market components add to assortments in net income among Intel and AMD. For instance, AMD's consideration regarding unambiguous market segments or product classes grants it to achieve higher edges that stood out from Intel's greater product portfolio. Furthermore, market interest, evaluating elements, and production network efficiencies can impact benefit levels contrastingly for each organization.

Future Growth Prospects

AMD's higher net revenue imparts financial investor trust in its development possibilities and potential for producing practical benefits. It shows a more grounded direction for revenue-driven improvement and financial investor returns stood out from Intel. In any case, it's key to think about various elements, for instance, income development, market share patterns, and industry progressions to study the long sensibility and serious arranging of the two associations.

Acid-Test Ratio

- **Intel:** 1.14
- **AMD:** 1.56

Liquidity Position

The acid-test ratio, otherwise called the quick ratio, gauges an organization's capacity to meet momentary commitments utilizing its most fluid resources (Krishnan, D., 2023). A higher proportion shows a more grounded liquidity position, as it recommends that an organization has more fluid resources accessible to cover its prompt liabilities without depending on stock deals.

Interpretation of Acid-Test Ratio

AMD's higher acid-test ratio of 1.56 contrasted with Intel's acid-test ratio of 1.14 infers that AMD has a superior capacity to cover its momentary liabilities utilizing its fluid resources. This exhibits that AMD could have an all the more impressive liquidity position, with a greater degree of outstandingly liquid assets contrasted and its continuous liabilities. Then again, Intel's insignificantly lower acid-test ratio recommends that while it has satisfactory liquid assets to cover its flitting responsibilities, its liquidity position may not be essentially just about as solid as AMD's.

Components of Quick Assets

Quick assets normally integrate cash, cash counterparts, marketable securities, and accounts receivable (Preetham, S.P., 2018). These assets can be speedily converted into cash within a concise period, making them significant for meeting fast financial responsibilities. AMD's higher acid-test ratio might be credited to a higher extent of money reserves, marketable securities, or effective management of receivables contrasted with Intel.

Inventory Management

The basic acid-test ratio rejects inventories from quick assets, as inventories might take more time to change over into cash in case of a liquidity emergency. A higher acid-test ratio recommends that an organization depends less on stock liquidation to meet momentary liabilities. AMD's higher acid-test ratio compared with Intel might demonstrate more successful stock administration rehearses or a lower extent of stock compared with its ongoing liabilities.

Implications for Financial Stability

A higher acid-test ratio is for the most part seen well by financial investors and lenders, as it demonstrates a more grounded capacity to weather conditions and transient monetary difficulties without turning to outer supporting or resource sales. AMD's more grounded liquidity position as reflected in its higher acid-test ratio might upgrade financial investor certainty and add to the organization's in general monetary soundness and flexibility.

Net Gearing Ratio

- **Intel:** 0.35
- **AMD:** -0.0413 (negative value)

Interpretation of Net Gearing Ratio

The net gearing ratio estimates the extent of an organization's support that comes from obligation compared with value (Hasan, I., 2018). A positive proportion demonstrates that an organization depends more on debt funding, while a negative proportion infers that equity financing surpasses debt and cash reserves.

Intel's Net Gearing Ratio

Intel's net gearing ratio of 0.35 proposes that the organization has a moderate degree of debt compared with its equity. This demonstrates a reasonable capital construction, with a piece of support obtained from debt to supplement equity.

AMD's Net Gearing Ratio

The negative net gearing ratio for AMD (- 0.0413) is probably the consequence of an error or distortion. A negative net gearing ratio recommends that an association's worth outperforms its obligation and cash reserves, which is marvellous and may show an error in the assessment.

Importance of Accuracy in Calculation

Precise financial ratios are major for critical examination. By AMD's net gearing ratio, an adverse response may not definitively reflect the association's capital structure or financial position. It's crucial to review the parts used in the assessment of the net gearing ratio for AMD to perceive any variations or bungles and assurance that the ratio is precisely interpreted.

Implications for Financial Management

It determines the amount of debt-to-equity multiplier that the entity deals with and thereby helps the capital structure to get better regarding the financial risk exposure. A reasonable outlay of capital as Intel proves manifested in its good ratio may enable certain funding of worthwhile learning activities even though it reduces risk. In the case of AMD, misinterpretation of its negative net gearing ratio may lead to the outsider's perspectives on the business's real debt levels which may ultimately affect both the corporate financial status. We should, by all means, correct any estimation faults, to estimate the firm's capital structure and the firm financial efficiency well.

Asset Turnover Ratio

- **Intel:** 0.29
- **AMD:** 0.3349

Interpretation of Asset Turnover Ratio

The asset turnover ratio measures how well an organization manages its resources to generate earnings (Patin, J.C., 2020). The last ratio shows that productivity is well used and the resource has no wastage.

AMD's Asset Turnover Ratio

With an asset turnover ratio of 0.3349, AMD exhibits higher proficiency in changing over its resources into income contrasted with Intel. This recommends that AMD is additionally viable in producing sales from its contributed resources, like property, plant, and equipment.

Intel's Asset Turnover Ratio

Intel's asset turnover ratio of 0.29 demonstrates generally lower resource usage productivity contrasted with AMD. While producing income from its resources, Intel might have space for development in advancing resource use to upgrade income generation.

Factors Affecting Asset Utilization

Contrasts in asset turnover ratios between Intel and AMD might be affected by different variables, including functional proficiency, production limit, stock administration practices, and sales volume. AMD's higher asset turnover ratio might be ascribed to its engaged product offerings, effective supply-chain management, or more popularity for its items contrasted with Intel.

Recommendations for Improvement

Cost Management and Profitability

Working on the financial administration of Intel requires a complete way to deal with cost administration and productivity. The organization ought to lead a careful investigation of its expense structures across all business portions to distinguish regions for streamlining. By carrying out cost-saving drives, for example, smoothing out tasks and further developing production network productivity, Intel can upgrade its benefit edges (Bloomberg, A.C.C., 2021). Furthermore, putting resources into innovative work (Research and development) to enhance and foster high-edge items will be pivotal for supporting the upper hand in the quickly advancing semiconductor market. Persistent observing and change of evaluating techniques will likewise be fundamental to guarantee productivity while keeping up with the competition in the market.

Liquidity and Working Capital Management

Productive liquidity and working capital management are fundamental for Intel's monetary well-being and strength. Reinforcing income anticipating and management practices will guarantee that the organization has satisfactory liquidity to meet momentary commitments and asset functional requirements (Hill, M., 2023). Advancing working capital administration by diminishing stock levels, further developing accounts receivable assortment processes, and broadening creditor liabilities instalment terms will upgrade liquidity. Laying out a money hold

strategy will additionally moderate liquidity risks and give support against unforeseen monetary difficulties or market vulnerabilities.

Capital Structure and Financial Leverage

Intel ought to painstakingly assess its capital construction to improve supporting expenses and oversee financial risk. Adjusting debt and equity financing will be critical to improving the expense of capital while keeping up with financial adaptability. Assessing existing debt arrangements and recognizing amazing open doors for renegotiating or rebuilding will assist with diminishing interest expenses and work on financial adaptability. Finding some kind of balance between debt and value funding will empower Intel to help its development targets while overseeing financial risk successfully (Shapiro, A.C., 2019).

Asset Utilization and Efficiency

Upgrading asset utilization and functional proficiency is vital to driving income development and productivity for Intel. Key interests in innovation, framework, and functional capacities will uphold efficiency enhancements and income development (Hutton, S., 2019). Carrying out measures to further develop asset turnover ratios, for example, advancing production cycles and lessening idle capacity, will improve resource usage. Utilizing information examination and execution measurements to distinguish shortcomings and smooth out activities will additionally further develop productivity and benefit.

Risk Management and Contingency Planning

Fostering a vigorous risk management structure is fundamental for Intel to recognize, evaluate, and moderate financial risks. This incorporates distinguishing and overseeing market risk, credit risk, functional risk, and regulatory compliance risk. Laying out alternate courses of action and stress-testing situations will get ready Intel for expected disturbances or antagonistic occasions, guaranteeing versatility despite monetary slumps or production network interruptions (Fiksel, J., 2023). Reinforcing corporate administration practices will additionally improve straightforwardness, responsibility, and consistency with administrative necessities, limiting lawful and reputational risks.

Investor Relations and Communication

Keeping up with open and straightforward correspondence with financial investors, examiners, and partners is basic for Intel to construct trust and trust in its financial performance and strategic direction. Giving opportune and exact financial reporting and disclosures, including key performance indicators and financial forecasts, will empower informed decision-production by partners. Proactive commitment to investors to request criticism and address concerns will cultivate areas of strength between corporate procedures and investor interests, expanding long-term investor value (Gamache, D.L., 2020).

Evaluation of New Investment Opportunities (Part C)

Payback Period (PBP)

Project A

Project A		
Year	Cash Flow	Cumulative Cash Flow (£, m)
0	-5000	-5000
1	2500	-2500
2	2000	-500
3	1000	500
4	-442	58
Pay Back Period		2.5

$$\text{PBP} = 2 \text{ years} + (500 / 1000) \text{ years}$$

$$= 2 \text{ years} + 0.5 \text{ years}$$

$$= 2.5 \text{ years or } 2 \text{ years \& } 6 \text{ Months.}$$

Project B

Project B		
Year	Cash Flow	Cumulative Cash Flow (£, m)
0	-1000	-1000
1	1500	500
2	1000	1500
3	1000	2500
4	-470	2030
Pay Back Period		0.67

$$\text{PBP} = 0 \text{ years} + (1000/1500) \text{ years}$$

$$= 0 \text{ years} + 0.67 \text{ years}$$

$$= 0.67 \text{ years or } 8 \text{ Months.}$$

Accounting Rate of Return (ARR)

Project A

Average Annual Profit = $(2500 + 2000 + 1000 - 442) / 4 = 1264.5$ million

ARR = (Average Annual Profit / Initial Investment) * 100%

ARR = $(1264.5 / 5000) * 100\%$

= 25.29%

Project B

Average Annual Profit = $(1500 + 1000 + 1000 - 470) / 4 = 757.5$ million

ARR = (Average Annual Profit / Initial Investment) * 100%

ARR = $(757.5 / 1000) * 100\%$

= 75.75%

Net Present Value (NPV)

Project A

NPV = Cashflow / $(1 + r)^1$ + Cashflow / $(1 + r)^2$ + ... + Cashflow / $(1 + r)^n$ - Initial Investment

NPV = $2500 / (1 + 0.0075)^1 + 2000 / (1 + 0.0075)^2 + 1000 / (1 + 0.0075)^3 - 442 / (1 + 0.0075)^4 - 5000$

NPV = $2500 / 1.0075 + 2000 / 1.01505625 + 1000 / 1.022669172 - 442 / 1.030339191 - 5000$

NPV = $2481.39 + 1970.33 + 977.83 - 428.98 - 5000$

NPV = 0.57 million pounds

Project B

NPV = Cashflow / $(1 + r)^1$ + Cashflow / $(1 + r)^2$ + ... + Cashflow / $(1 + r)^n$ - Initial Investment

NPV = $1500 / (1 + 0.0075)^1 + 1000 / (1 + 0.0075)^2 + 1000 / (1 + 0.0075)^3 - 470 / (1 + 0.0075)^4 - 1000$

$$\text{NPV} = 1500 / 1.0075 + 1000 / 1.01505625 + 1000 / 1.022669172 - 470 / 1.030339191 - 1000$$

$$\text{NPV} = 1488.83 + 985.17 + 977.83 - 456.16 - 1000$$

$$\text{NPV} = 1995.67 \text{ million pounds.}$$

Evaluation and Recommendation

In the wake of leading an exhaustive examination utilizing the Payback Period (PBP), Accounting Rate of Return (ARR), and Net Present Value (NPV) methods, it is clear that every strategy gives important experiences into the speculation presented by Projects A and B. The Payback Period examination features Project B's capacity to recover its underlying speculation faster than Project A. On the other hand, the ARR technique shows that Project B creates a higher typical pace of return compared with its underlying speculation, flagging better momentary productivity. Notwithstanding, while considering the Net Present Value, which represents the time value of money and all incomes over the project's life, Project B arises as the unrivalled decision. With a higher NPV, Project B reflects more noteworthy value creation potential for Intel's investors over the long term. Thus, Project B's benefits in the payback period and Project B's strengths in accounting rate of return, and in the NPV examination recommends that Project B ought to be taken on, lining up with Intel's objective of expanding investor value and long-term productivity.

Recalculation of NPV

Project A

$$\text{NPV} = \text{Cashflow} / (1 + r)^1 + \text{Cashflow} / (1 + r)^2 + \dots + \text{Cashflow} / (1 + r)^n - \text{Initial Investment}$$

$$\text{NPV} = 2250 / (1 + 0.0075)^1 + 1800 / (1 + 0.0075)^2 + 900 / (1 + 0.0075)^3 - 397.8 / (1 + 0.0075)^4 - 5500$$

$$\text{NPV} = 2250 / 1.0075 + 1800 / 1.01505625 + 900 / 1.022669172 - 397.8 / 1.030339191 - 5500$$

$$\text{NPV} = 2233.25 + 1773.30 + 880.05 - 386.09 - 5500$$

$$\text{NPV} = -999.49 \text{ million pounds.}$$

Project B

$$\text{NPV} = \text{Cashflow} / (1 + r)^1 + \text{Cashflow} / (1 + r)^2 + \dots + \text{Cashflow} / (1 + r)^n - \text{Initial Investment}$$

$$\text{NPV} = 1350 / (1 + 0.0075)^1 + 900 / (1 + 0.0075)^2 + 900 / (1 + 0.0075)^3 - 423 / (1 + 0.0075)^4 - 1100$$

$$\text{NPV} = 1350 / 1.0075 + 900 / 1.01505625 + 900 / 1.022669172 - 423 / 1.030339191 - 1100$$

$$\text{NPV} = 1339.95 + 886.65 + 880.05 - 410.54 - 1100$$

$$\text{NPV} = 1596.11 \text{ million pounds.}$$

Based on the fact that Project A has negative NPV and Project B possess positive NPVs, the initial investment is covered by the upcoming cash flows minus their discounted value in Project B. The NPV for Project A is negative, being (£999.49) million and Project B's NPV is remarkable, being £1596.11 million. This financial outcome acts as proof that project B is financially viable, meaning that project B is not only profitable but will return the investor's funds with a profit after the full project lifespan. Project B has a higher NPV rate. Therefore, the greater value of NPV for Project B means that it generates a higher return on investment than Project A. This disparity between NPV rates between the two projects shows why essential investment analysis is great. The superior NPV of project B indicates it is more appealing to investors as it offers the opportunity to maximize the return and create value shared between these parties. Hence, if the forecasting of NPVs is followed, Project B becomes an optimal investment due to the return on investment that it is expected to yield.

Advantages and Disadvantages of Evaluation Techniques

Payback Period (PBP)

Advantages: The Payback Period is a clear metric that is straightforward, making it open for managers and stakeholders alike (Medal, L.A., 2021). Its emphasis on liquidity and risk gives a fast evaluation of what amount of time it will require to recuperate the initial investment amount, which can be especially helpful in circumstances where liquidity is an essential concern.

Disadvantages: The Payback Period disregards the time value of money, meaning it doesn't represent the way that a dollar today is valued more than a dollar in the future (Chaysin, P.,

2016). Furthermore, it ignores income past the recompense period, possibly neglecting the drawn-out productivity of speculation. This constraint can prompt wrong choices, particularly in complex undertakings with unsure future incomes.

Accounting Rate of Return (ARR)

Advantages: The ARR is easy to work out, depending on bookkeeping measures like benefits and starting investment amount. It gives a clear proportion of productivity, permitting managers to survey the profit from the investment compared with the underlying expense rapidly (Magni, C.A., 2019).

Disadvantages: Like the Payback Period, the ARR doesn't consider the time value of money, which can twist the genuine benefit of speculation. Moreover, it doesn't represent incomes over the project's life, zeroing in exclusively on bookkeeping benefits (Zutter, C.J., 2019). Moreover, the ARR might be dependent upon control because of bookkeeping rehearses, as it depends on bookkeeping estimates that can be affected by administrative attentiveness.

Net Present Value (NPV)

Advantages: The Net Present Value method tends to the weaknesses of the Payback Period and ARR by considering the time value of money (Siziba, S., 2021). By limiting future incomes back to their current worth, NPV integrates all incomes over the project's life, giving a far-reaching proportion of significant value creation. This permits managers to settle on informed choices given the genuine monetary productivity of any investment.

Disadvantages: Ascertaining NPV requires assessing the expense of capital, which can be testing and subjective. Also, the NPV technique includes complex computations, requiring capability in monetary examination. In addition, NPV may not represent subjective factors, for example, essential arrangement, economic situations, and administrative risks, possibly restricting its adequacy in specific dynamic settings.

Non-Financial Factors

While assessing capital tasks, managers should consider non-monetary elements along with financial measurements to pursue well-versed choices. Right off the bat, the essential arrangement of a project with the organization's drawn-out goals is central. Determining whether

the project emphasizes what the association's general purpose and mission is about, is very important as it ensures all efforts made are result-oriented, and promote progress. Also, the particular risk management represents the capability for the realization of the possible project damages and the elimination of critical elements. In a bid to deal with the inherent risks, managers can invent techniques to minimize negative effects and also provide the organizations with room for effects and protection of their reputation and feasibility. As well, the ecological and social effects of the particular task have to fit the bill if we are ever to succeed in the socially sensitive current atmosphere. Analysis of the role of environmental sensitivity and social accountability as organizational morals principles on partner relations, brand reputation, and business growth management.

Reviewing technological possibilities as well as the availability of the capabilities and resources of the organization required for the successful implementation of the project shall also be considered as critical factors. Knowing about the innovative practices and the restrictive measures can be a guide for the board as they pursue their tasks with full knowledge of optimal asset distribution and task execution systems. In addition to that, the goal to ensure proper guidance is the base for avoiding legal and administrative challenges. Verifying that the task is consistent with guiding laws, directives and requirements that entail a fair operation free of excessive financial litigations and penalties becomes a top priority goal that not only guarantees but also makes the organization look good ethically.

Stakeholder involvement is another thought on top of the list, as projects may disturb different actors, such as customers, service providers, supply chains and networks of providers. The life cycle of a project is, that only if, partner interests and concerns are understood and addressed in a balanced approach that creates win-win-win situations, will it maximize transparency, foster more understanding, and earn utilities and peoples' support. Now, at last, listing out the demands of the market is important in finding out how practical the project is and whether it can become a success or not. Scrutinizing market habits, the competitive environment, and the inclinations of consumers allow an enterprise to be well-positioned concerning market changes and then come up with suitable response mechanisms to fulfil the needs of customers and by doing so increase profitability.

In this way, the managers can include non-financial criteria such as mission, vision, ethics,

employee engagement, sustainable interest and others in their financial analysis, which enables them to make more qualitative and complete decisions concerning capital investments and thereby increase the organisation's long-term value creation.

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