# Valuing Social Networks: A Discounted Cash Flow Approach for Digital Growth Assets

#### Shiven Dhawan

Boston University

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#### ABSTRACT

Given the distinctions between social networks and traditional corporations, this paper addresses the valuation approach for social networks and the characteristics that arise from these companies' unique operations. After discounting the company's cash flows, the findings are analysed, and conclusions on the accuracy of social network value are drawn.

#### **INTRODUCTION**

Nearly every year, new, comparable businesses enter the social media space, offering their services and drawing an increasing number of new members. Furthermore, social networks are listed as fast-growing firms, and because of their increasing number and competitiveness, it becomes increasingly difficult to accurately determine the worth of these businesses.

The study's goal is to analyse social network valuation features, which are crucial to achieving accurate and sufficient assessment findings.

The research is theoretically significant in identifying social network features that impact the assessment of these companies due to the lack of knowledge about the social network market. It is also of practical importance because the methodology used in this work can assist potential investors and owners in determining the project's further attractiveness. The research discounts the company's cash flows to obtain adequate and accurate valuation results.

## LITERATURE REVIEW

Generally speaking, a social network is an interactive, multidisciplinary online platform designed to foster and sustain human contact. A social network is an automated website that enables users to meet new people, exchange information, and communicate with each other to build social ties. Additionally, social networks can be used for recreational purposes, such as watching films or listening to music. Users of this network contribute material to these types of Internet businesses. When Mark Zuckerberg launched Facebook and joined the social media space in 2004, it was a tipping point for social media.

It's worth noting that Duzhnikova, a respected authority in the field, has identified the following qualities as typical of social networks:

- Establishing a personal user page;
- Engaging with other users on the social network by sending messages, files, music, and ratings;
- Building a page to achieve a particular objective, such as making friends, blogging, or viewing content;
- Meeting the requirements of the resources obtained from establishing a page in a social network [1].

In addition to the distinct features of social networks, scientists also identify the types that further categorise them.

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Nonetheless, it is essential to note that there are numerous categories of social networks because specialists need to provide a general distribution of them based on their kinds. Here's one of them:

• Mass social networks have no unique theme focus, so access to them is unrestricted. Nonetheless, they must remember that their actions must comply with and not violate the law.

• Photo and video hosting: Sharing images and movies on these social networks is a significant means of communication. Bloggers and others in creative professions typically desire these kinds of social networks to increase the number of views, comments, and ratings of their content.

• Thematic: Social networks, including niche ones like dating services, play a crucial role in bringing people together based on shared hobbies, occupations, or just to make new friends, fostering a sense of inclusion and community.

It's interesting to observe the factors that draw people to social media, some of which include:

1) The number of people utilising electronics in society is rising quickly.

Mobile devices allow us to keep in contact anywhere and at any time, and social networks make this possible by providing free text and voice messages and audio and video conversations.

2) The requirement for public approval

Social networks are now frequently used for self-affirmation and income generation. Getting a lot of likes, comments, and reposts might help you feel more important to other people and boost your self-esteem. A large number of followers or subscribers helps new bloggers establish who will eventually monetise their following.

3) The necessity of dialogue Some people use social networks only to communicate with friends, coworkers, and strangers they meet in hopes of forming friendships and relationships and exchanging information.

4) Viewing content Additionally, most social networks let you browse different collections tailored to your interests, read news, watch films, listen to music, post and rate images, and keep up with current events and other people's lives.

5) Social networks are designed for adaptability and ease of use. They include sophisticated features that cater to a variety of needs, yet they also offer a user-friendly interface with limited functionality.

Business and social media are tightly intertwined. Social network development has made them extremely attractive as investment opportunities. As a result, entrepreneurs invest large sums of money in this sector and are an essential part of society that actively promotes its growth. This allows researchers and scientists to enhance how they use information and businesses to operate as efficiently and competitively as possible. The difficulty of accurately valuing such a corporation is exceptionally pressing.

#### FEATURES OF SOCIAL NETWORKS

Social networks are unlike traditional businesses because of various characteristics and attributes that affect the organisation's value. Among these are the following characteristics:

• Volatility of capital structure. Due to their risky nature—the success of which rests on the uniqueness of the concept and the monetisation of users—social networks are businesses that venture capitalists or owners mostly fund.

• Minimal or no cost per usage. Although social networks are generally accessible, many offer premium membership services for their more sophisticated features. Nevertheless, the costs of these goods and services are affordable enough for anyone who wants to buy them.

• The end product of labour in social networks is an intangible good or service, which is the unique value proposition these platforms offer.

• Income indicators that are low or negative during the initial years of operation.

• Revenue from advertisements.

• A "network effect" being present. Social networks' revenue is directly correlated with their user base; customer growth contributes to a non-linear increase in the company's worth in this scenario.

These characteristics impact the method chosen to determine the company's value. As a result, the degree to which the obtained results deviate from the actual assessment and the conclusions that must be drawn from the calculated results will depend on how these characteristics are considered.

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# METHODOLOGY OF SOCIAL NETWORK VALUATION AND RESULTS

The primary objective of the assessment is to calculate the company's valuation by summing up the future periods' free cash flows or the total of the current values of the anticipated income flows while accounting for risk. The discount rate, a crucial factor in this process, is determined using the weighted average cost of capital. It plays a pivotal role in converting the forecasted future income to the present value, underscoring its significance in the valuation process [5-7].

Two categories of corporation-free cash flows exist equity-free cash flow and company-free cash flow [5-8].

Start by thinking about the free cash flow to equity discounting approach.

Discounting the free cash flow to equity (FCFE) is the pivotal mechanism in this process. This method, which determines the company's shareholder value, is highly regarded by shareholders and business owners, underscoring their integral role in determining the company's worth [2–5].

The estimation of the company valuation by means of FCFE is applied using the CAPM (Capital Asset Pricing Model) Sharpe's model - a model of pricing financial assets. When calculated using the discounted cash flow to equity method, the discount rate  $r_$  is the expected rate of return on a long-term asset, The total of the debt's market value and the equity capital quantity accounts for the firm valuation [7]. Despite all of its benefits, the discounted cash flow to equity method is not suitable for evaluating social network valuations for several reasons: first, it calculates the company's overall value rather than just its shareholder value; second, it evaluates the value using the discounted method of cash flow of equity, projections and assumptions regarding the company's debt cost and future credit policy are required.

Let us examine a technique for valuing social networks that discounts the company's cash flow. A company's free cash flow is the key to its free cash flow to the firm (FCFF or FCF). In this method, the weighted average cost of capital, or discount rate, is used to forecast the estimated company's cash flows. This discounting method's computation considers the company's debt and equity capital values [12–15].

The company's revenue and expenses must be predicted when accounting for social network valuations. It is important to remember that social networks earn a significant portion of their earnings from advertising, gradually increasing their overall revenue.

Research and development, sales, and marketing are the primary expenses of social networks. "Cost price" refers to office expenses, electricity, depreciation, equipment, and human costs.

You can ascertain the cash balance following investments in capital assets since the method's cash flow creation depends on the company's assets [5-7, 16–18].

The discounted cash flow method is the most theoretically grounded regarding firm valuation. This approach's primary benefit is that it considers the market's and the company's potential for future growth.

It is worthwhile to draw the following findings regarding the characteristics that influence social network valuations using the company's discounted cash flows:

According to the methodology, because it is impossible to foresee a company's future credit policy, the discounted cash flow to equity approach is not appropriate for businesses with unstable financial structures.

The proper estimation of social network value can be achieved by discounting free cash flow to the firm approach. It is important to note that to calculate the value using this method, cash flows must be predicted while accounting for the fact that social networks tend to increase their advertising revenue share. This approach also takes into account the fluctuating capital structure of social networks. Social networks mostly spend money on "price cost," sales and marketing, and research and development. It is essential to keep the structure in place and consider this when creating spending estimates. Additionally, the "network effect," which affects the valuation's outcomes, can be regarded as using the discounting cash flows to the firm method.

Social network ratings can only sometimes provide an accurate picture of the state of the market, as a company ranked higher in the world may not necessarily be more expensive than one ranked lower. An organization's geographic location, or its nation, can impact its worth. China has a population that is significantly more than that of any other nation. Still, they also have a closed Internet and stringent social media regulations, making it challenging to monetize users and subscribers and produce revenue [16–18].

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# CONCLUSION

This article discussed the income approach to valuing social networks, which includes discounting free cash flow to equity and the method of discounting free cash flow to firms. It identified social networks' features and made recommendations for their application based on the theory and methodology for assessing the value of the company that has been studied.

When selecting an evaluation method, considerations like the market size and the stability of the finance structure must be made. The most accurate way to evaluate the worth of social networks is to use the discounting cash flow to firm technique; however, this method requires consideration of the unique arrangement of the company's revenue and expenses, as previously mentioned.

The outcomes acquired during this essay's writing contain precise details crucial for practical usage. It is important to note that, in addition to the techniques covered in this article, other techniques should be looked into in the future as part of the valuation of social networks. Two examples of these techniques are the multiplier method and the method of natural options. This article can serve as a foundation for additional study on the subject and the creation of novel methods for valuing social networks according to their attributes.

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