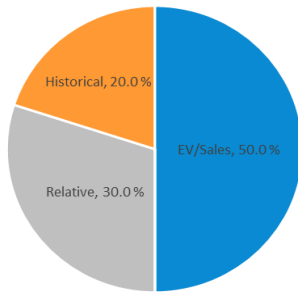




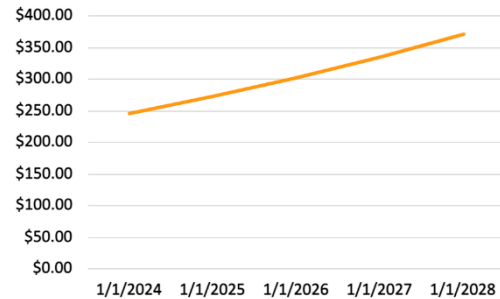
Covering Analysts: Ashwin Nelson and Sarah Gruber

Intrinsic Value: \$222.08

Valuation



Price Target



Capital Structure

Equity	93.9%
Debt	6.1%

CAPM Presumptions

Beta	1.20
Risk Premium	5.9%
Risk-Free Rate	3.8%
Terminal Growth Rate	%

WACC Presumptions

Cost of Equity	10.9%
Cost of Debt	5.5%
Cost of Capital	10.5%

Executive Summary

This equity report provides an analysis and evaluation of the current and future performance of **Workday, Inc.** over a future period of five years. Our method of analysis includes the **discounted cash flows model (DCF)**, **historical model**, and **comparable model**, as well as various ratios including but not limited to profitability, debt, and leverage ratios.

Results of data analyzed show that the company is fundamentally sound. The company maintains a leading market share of 19.1% in terms of worldwide SaaS ERP Revenues, recently introduced an Industry Accelerator program, and can soon achieve GAAP profitability.

Our report finds that the prospects of the company in its current position are **very positive**. The primary catalysts for long-term growth include:

- Strong customer retention enables further expansion
- Prospective clientele within the healthcare sector
- Early entrant in implementation of AI platforms & ECM
- Ability to achieve GAAP profitability with appointment of Carl Eschenbach

We conclude that this company's stock is attractively **undervalued**, resulting in a margin of safety of **16.2%**. Reasons that the market has placed this stock underweight include:

- The market fails to recognize Workday's potential of becoming a company in comparable size to that of Oracle and SAP
- The market fails to take into account uncharacteristically large marketable securities during fiscal 2023 when projecting securities
- The market fails to project future revenues generated by growth in new Industry Accelerator program success

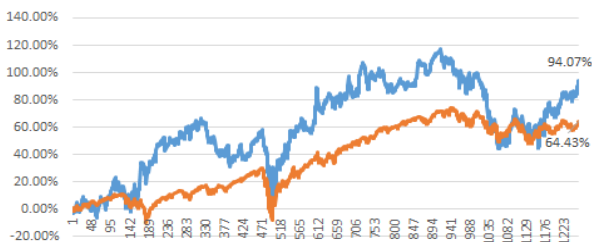
Intrinsic Value

\$222.08

Margin of safety

16.2%

WDAY (Blue) vs S&P 500 (Orange) 5Y, Daily



Key Stock Statistics:

52-Wk Range (\$)	128.72-272.50	Dividend Yield	0%	Book Value/Share (mrq)	7.40
Beta	1.20	Diluted EPS (ttm)	\$-1.44	Operating Margin (ttm)	-3.6%
Market Capitalization (\$BN)	\$48.68B	P/E (ttm)	N/A	S&P Credit Rating	BBB
Forward Annual Dividend	0	P/B (mrq)	9.1x	Institutional Ownership	87.49%

Source: Yahoo! Finance

Recent News & Management Guidance

Recent News

- Workday co-founder, Aneel Bhusri, is paving the way for his successor, Carl Eschenbach. Effective December 2022, Bhusri and Eschenbach began serving as co-CEOs, with the plan for Eschenbach to assume full control January 2024
- To power AI and ML innovation, Workday announced a \$250 million expansion to their Workday Venture fund
- Over the last year, Workday insiders have been selling company stock as opposed to buying. This raises a red flag that Workday may be facing losses in the future. Within these last three months, insiders have sold \$11 million worth of stock. The largest sell this year was by co-CEO, Aneel Bhusri, selling stock while at a market price of \$197 per share, receiving \$2.3 million
- During fiscal 2023, Workday launched their new Industry Accelerator program combining Workday partners, services, and solutions. The Industry Accelerators are meant to build onto current automations and streamline operations for customers within industries that phase complex marketing dynamics, cloud interoperability challenges, and legacy technology. These accelerators are primarily regarding the banking, insurance, technology, and healthcare industries. Through this, complex operations within these industries are able to be simplified. The Industry Accelerators program was first introduced September 2022 in the US and then was introduced within Europe, the Middle East, and Africa (EMEA) that November. Through this program, customers will be able to benefit from a robust ecosystem
- Workday is seeing continued momentum within the healthcare industry as they have recently added several new healthcare organizations following their Industry Accelerator program debut
- Workday has received numerous awards each year from Comparably Awards, whose recipients are decided on real feedback from employees. Alongside other top performing companies, Workday was awarded best company for diversity, best company for work life balance, best CEO, best company culture, best company perks and benefits, and best company for women in 2022. For the year 2023, Workday has been awarded the best teams for engineering, product and design, sales, and HR, best place to work in the Bay Area, best global culture, and best company outlook



Management Guidance

- Fiscal 2024 strategy is to double down in strategic growth areas through focusing on their key industries, investing in their client base and partner ecosystem, as well as continuing their innovation efforts.
- During fiscal 2023 Q4, revenues increased by 19.6% compared to last year's fiscal Q4, at a value of \$1.65 billion
- Subscription revenue during fiscal 2023 Q4 also increased compared to last year's by 21.7%. Workday is also on track to maintain the midpoint of its expected subscription revenue for fiscal 2024.
- During fiscal year 2023, Workday suffered an operating loss of \$222.2 million. Operating losses have increased by 1.3% of revenue compared to fiscal 2022.

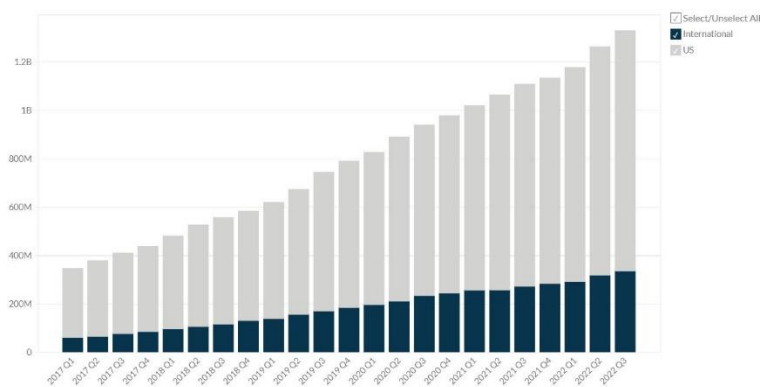
Business Description

Founded in 2005, Workday, Inc. is a cloud-based enterprise software company whose headquarters are located in Pleasanton, California. Workday specializes in Sales-as-a-Service (SaaS) that specializes in business-to-business solutions regarding financial and human capital management with contracts between some of the largest companies worldwide. Co-founders, Dave Duffield and Aneel Bhusri, began the company after their previous enterprise resource planning firm, PeopleSoft, was acquired by Oracle during the same year. The company was first initially publicly offered in October of 2012 under the ticker "WDAY." While Workday does not explicitly divide its business within its financial statements, Workday's two main recognizable segments consist of Subscription Services and Professional Services. Within the Subscription Services segment, revenue is derived from the sale of its various cloud software applications. On the financial side, Workday's software aims to serve needs in accounting, financial reporting, procurement and inventory, project management, revenue tracking, and expensing. Workday's human capital management software assists businesses with staff payroll, benefit plans, labor planning, talent recruiting and management, and attendance tracking.

Revenue Drivers

As aforementioned, Workday's two revenue segments are recognized as Subscription Services and Professional Services. While these segments are separate in that they revolve around different specific business activities, they are both focused on the selling of Workday's financial management, enterprise resource planning (ERP) and human capital management (HCM) software applications. It is important to note that these business segments are different from customer relationship management (CRM), which comprises a significant portion of the cloud-based software industry, but is a

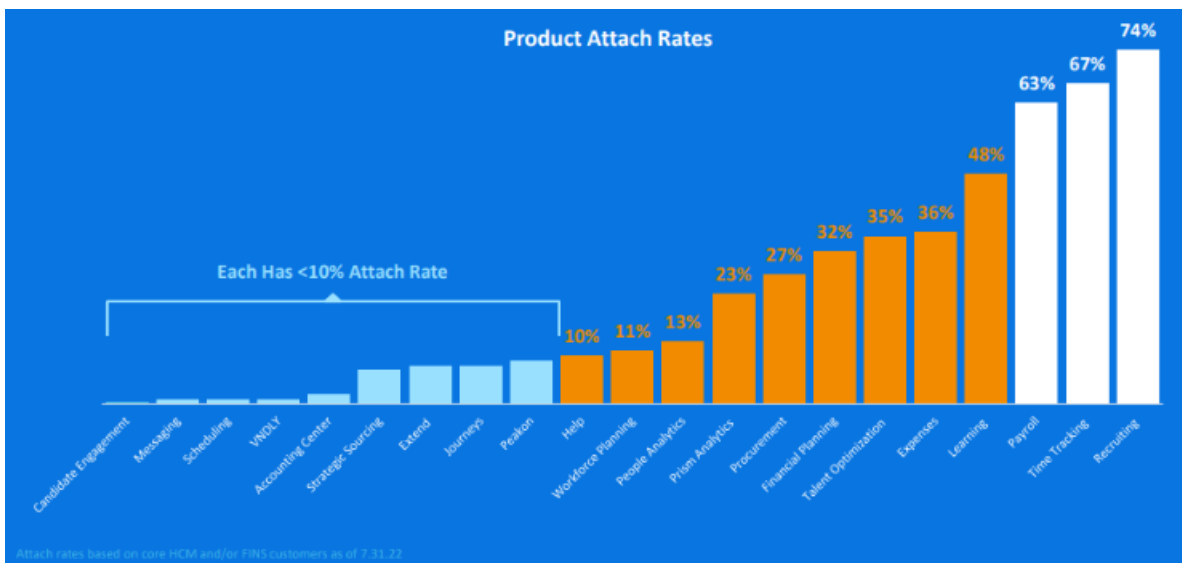
field that Workday does not operate in. In FY23, Workday recorded approximately \$6.2B in total revenues as compared to FY22's mark of \$5.1B, resulting in 21% growth YOY. Additionally, Workday currently holds a subscription revenue backlog of approximately \$16.4B, which represents 28% YOY growth from the FY22 figure of \$12.8B. This backlog consists of revenues that Workday is designated to receive from contracts that they have initiated in which revenue has not been officially recognized. Countries outside of the United States make up a notable portion of Workday's revenue, as 24.6% of FY23 revenue was earned outside of the United States, a slight increase from 24% the previous year. Domestically, Workday's revenue grew 21.7% YOY, while internationally, Workday saw growth of 18.5% YOY. With offices established in over 30 countries, Workday earns revenue in over 175 countries.



Subscription Services: 90% of FY23 Revenue



The Subscription Services segment is by far Workday's most significant revenue generator and recognizes income from the selling of their main product offerings: financial management, ERP, and HCM applications. Workday sees the majority of its revenue stem from contracts that it holds with clients, most of whom are small, medium, and large businesses, which enables the usage of Workday's cloud platforms for a set period of time. Large corporations specifically comprise a large section of Workday's client base, as FY23 reports indicate that the firm contracts with around 50% of Fortune 500 retail companies, and 25% of Global 2000 retail companies. Workday is used by approximately 55 million people worldwide, and holds contracts with around 12,000 companies, resulting in an average company size of 4,500 employees. Variables that contribute to changes in this value include price and fee structures, the number of customers they add within a certain period, the size of the client in terms of employees, and the number of applications that each client purchases. In FY23, Workday's revenues equaled approximately \$5.67B as compared to \$4.55B in FY22, resulting in a 24.6% YOY increase. This strong growth was spearheaded by substantial customer retention figures, as gross retention stood at 96%, while net retention stood at over 100%, which indicates that even with strong client carryover, Workday was able to improve net retention through upselling to existing customers, as 12 of the 21 core product offerings within HCM and financial management saw attach rates greater than 10%, indicating that corporations are very likely to purchase add-ons to Workday's base offerings. Furthermore, Workday also cited strong adds from new customers during FY23, and while they did not disclose the exact amount of new total clients, they reported that seven new Fortune 500 companies and 11 new Global 2000 companies contracted with Workday during the year.

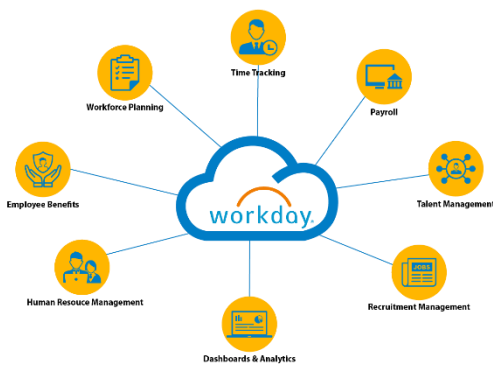


Professional Services: 10% of FY23 Revenue

Workday's Professional Services segment consists of revenue earned from fee-based integration and deployment services that allow companies to effectively integrate their platforms into their day-to-day operations. Workday's Launch platform is specifically designed to help train employees to help prevent over or under-budgeting, delays in implementation, and ultimately, integration failures. The success of this segment is heavily linked with the success of the Subscription Services segment, as they both rely on the volume of Workday's transactions, the number of clients they contract with, and the complexity and magnitude of service that they provide for their clients. However, the key distinction is that the Professional Services segment requires selling to new clients or upselling to current clients, while the Subscription Services segment benefits far more from high retention rates. In FY23, Workday saw segment revenues of \$649M, representing 9% growth YOY from the FY22 mark of \$592M. While CEO Aneel Bhusri indicated that Workday saw strong net customer adds in FY23, most of the growth in the segment was attributed to an increase in complexity and volume of applications being used by existing high value clients incurring greater need for training and optimization.



Product Applications



Workday’s product line is vast as they provide their clients with over 550 preconfigured business processes that they can copy, adapt, and extend. With the flexibility of combining multiple product applications, clients are able to create a plan that best fits their service and business needs. While Workday offers a variety of products that contribute to their revenue, it is noted that these applications offer analytics and service capabilities aiding three primary business leaders; Chief Financial Officer (CFO), Chief Human Resources Officer (CHRO), and Chief Information Officer (CIO). Assisting them across various industries, Workday delivers product applications for financial management (FINS), human capital management (HCM), planning, strategic sourcing, and

offers an “Employee Voice.” Workday is most recognized for their HCM products, which generate the most revenue for the firm as compared to their other offerings. Outside of these primary products, Workday offers additional processes and applications allowing clients to maximize their value. This includes, but is not limited to, analytics and reporting, payroll, and spend management.

Workday Financial Management

Workday’s financial management solutions help manage **CFOs** core financial processes and maintain general ledger accounting information in order to simplify the accounting process. These applications are built on the foundation of AI and ML, making these insights more accessible as real-time financial information can be provided. Through this, transactions and changes are documented continuously, allowing for auditing to be under maximum control. Along with showing financial history, they also provide plans and forecasts to drive business strategy and growth. Some companies that utilize Workday’s financial management product applications include KeyBank and J.B. Hunt.

Workday Human Capital Management (HCM)

Workday’s suite of HCM applications aiding **CHROs** is also built on an AI and ML foundation. This application is able to organize an organization's employee's entire life cycle, allowing HR teams to develop, reskill, hire, pay, and provide meaningful experiences for their clients' workforce. Through Workday’s Skills Cloud, talent is automatically aligned with opportunities. Payroll, HR management, Workforce management, and talent management can also be utilized, allowing companies to optimize their workforce. Popular companies that utilize Workday’s HCM applications include Dell, General Electric, and Comcast.

Workday Adaptive Planning

Combining AI and ML foundations from financial management and HCM solutions, Workday is also able to provide a planning solution for **both CFOs and CHROs**. This planning solution provides a process that can help organizations make informed decisions in rapidly changing situations by modeling finance, workforce, sales, and operational data. Available plans include financial planning, workforce planning, sales planning, and operational planning. Financial planning offers flexible budgeting, scenario planning, and reporting, while workforce planning focuses on planning for the skills you need both today and in the future. Sales planning includes planning sales resources, optimizing rep capacity, and setting quotas, while operational planning works to drive better collaboration across departments.



Workday Strategic Sourcing

Workday’s trusted sourcing software allows companies to achieve better business outcomes. With Workday’s Strategic Sourcing, the source-to-contract process is streamlined, providing a clear view of suppliers, reports are saved and tracked, and

contract management is available. When first utilizing Workday's Strategic Sourcing, new clients can quickly realize their environmental impact and be able to work towards closing their sourcing loop. Various suppliers are also suggested, encouraging clients to initiate a strategic partnership. With Workday Strategic Sourcing, supplier and stakeholder engagement is improved.

Workday Peakon Employee Voice

With Workday's Peakon, this listening platform gives clients real time insights on actions they need to take in order to empower and engage their teams. Through understanding engagement, clients are able to boost productivity. With the Workday Peakon, employees provide feedback and discuss what's on their mind, work to improve employee engagement, retain employee retention, and enhance leadership development.

Addition: Workday Analytics & Reporting

Through analytics, clients are able to make smarter decisions at a faster rate. After sorting vast amounts of data, Workday is able to compile information into complete graphs and charts, allowing clients to make informed decisions. By utilizing benchmarks, clients are able to compare their performance against other customers and competitors.

Addition: Workday Payroll

Workday Payroll offers a unified system keeping payroll, time, and HR in sync. Workday notes that the payroll cycle time can be reduced by an average 69%, helping to simplify payroll. For companies with a global workforce, Workday offers payroll primarily for US, France, Canada, and the UK. However, if a company has workers in other countries, Workday makes it very easy to integrate with one of their third-party providers around the world. Through Workday's Global Payroll Cloud (GPC) program, it is easy to integrate third-party payroll providers around the world. Some providers include ADP, activpayroll, and Immedis.

Addition: Workday Spend Management

Workday also offers spend management solutions for **CFOs**, assisting them, managing indirect spending, streamlining supplier selection and contracts, and building/executing sourcing events. Leading companies that utilize Workday's spend management are Netflix, Salesforce, and KeyBank.

Prices and Fee Structure

Mentioned previously, Workday's primary source of revenue is derived from subscription fees. With Workday offering a wide variety of applications that can be combined and integrated together, tailoring towards each company's specific needs, subscription quotes vary. Due to the ability to customize, Workday states that they do not present any pricing information to the general public or on their website. However, it has been reported by users that the pricing starts at \$99 per user, per month. Although an overall subscription fee structure outline could not be found, it has also been quoted that the typical minimal annual cost is \$275,000, making Workday a service that is better utilized by larger companies as they can afford the high fee. For the majority of subscriptions, clients elect to utilize either an annual or quarterly payment route.



Business Strategy

As a relatively new company to the enterprise software industry, Workday can be viewed as a late entrant to the market, with major players such as Oracle and SAP having already established dominant market leads by the time that Workday had its initial public offering in 2012. However, because Workday's applications have been cloud-based, they have been able to gain market share on these well-known competitors, who both experienced difficulty in transitioning from native to cloud-based software. Still, Workday's focus for the past decade has consistently been to increase their scale over time. For Workday,

increasing scale presents itself in revenue growth over time, and because this relies so heavily on client and application volume, Workday heavily emphasizes transaction volume, the size of their client-base, and the status of the companies that they contract with. To facilitate their aggressive growth strategy, Workday has not shied away from incurring heavy costs in product development, sales, and marketing, which have equaled over 67% of Workday's on average for the past five years, resulting in consistent negative EBIT figures. These high costs have enabled Workday to maintain exponential revenue growth, as their total revenue has increased over 220% since FY19 and have averaged 21.9% YOY growth during that period. One benchmark that Workday attributes to this substantial growth is the increase in transaction volume the firm has seen in recent years; in FY23, their software processed over 629 billion transactions, which was a 42% YOY increase from the previous year. Most recently, CEO Aneel Bhusri identified a goal of reaching \$10B in revenue but has indicated that the company is now becoming more focused on achieving positive net income for the near future.

One of the main factors that Workday feels allows them to set themselves apart from competitors is their unique value proposition. Workday is far more focused on creating specific solutions for businesses than they are on creating a one-size-fits-all application platform, which is why they lack consistency in their price-and-fee structure. Workday's approach to artificial intelligence exemplifies their commitment to this unique value proposition, as Workday has been an early adopter in the rapid expansion of artificial intelligence and machine learning as they have long implemented these technologies into their product offerings. Workday has been adamant that the continued development of artificial intelligence will completely transform how business is conducted in the next decade, as companies are beginning to demand enterprise platforms that allow for artificial intelligence solutions across an entire organization.



Workday does generate a large majority of its revenue domestically, but they have seen consistent growth in the amount of revenue generated internationally and believe that there are notable opportunities to expand further globally. Despite international sales comprising around 25% of their total revenue in FY23, Workday has highlighted the possibility of overseas clients representing over half of their total addressable market. In the Deutschland – Austria - Confoederatio Helvetica (DACH) and Nordic markets, Workday has indicated that they are gaining momentum in increasing their market share.



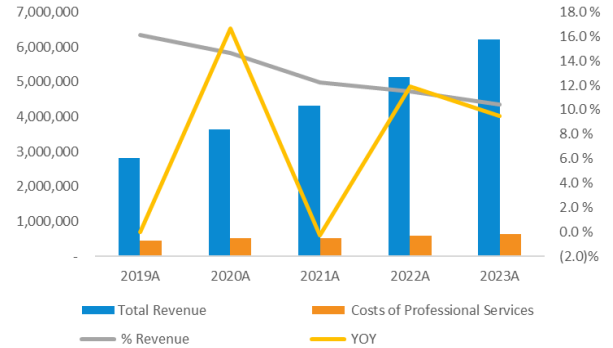
While Workday has incurred heavy costs for sales and marketing, their brand is not quite as salient to the general public as other brands with similarly large market caps. Because the entirety of their income stems from business-to-business transactions, Workday is far more focused on direct selling than publicly recognizable advertising. This direct selling usually targets senior leaders within organizations, particularly Chief Financial Officers, Chief Information Officers, and Chief Human Resource Officers. Additionally, Workday also relies heavily on referrals from current users to expand their base, which means that a high level of product satisfaction is required. With that being said, Workday is seemingly beginning to consider brand awareness among the general public more significantly, as they launched their first major advertisement during Super Bowl LVII earlier this year.

Cost Drivers

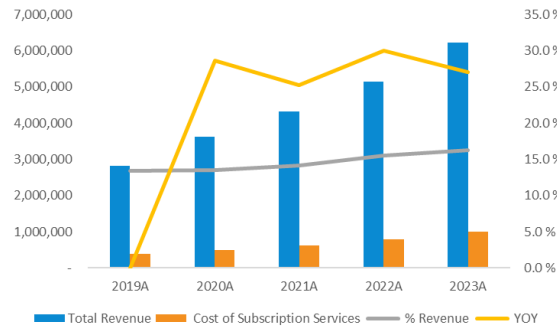
To provide both professional and subscription services, some of Workday's cost drivers include costs related to professional services revenue and subscription services revenue. Outside of these costs, Workday's three primary cost drivers include product development costs, general and administrative expenses, and sales and marketing expenses. Historically, it can be noticed that all three of these cost drivers have lowered in percentage of revenue over the past five years. These expense decreases are due to Workday gaining more revenue overall. As they expect to increase their customer base, it doesn't require too many costs as the applications are already established.

Costs of Professional Services Revenues

The costs of professional services revenues include expenses related to subcontract expenses, travel expenses, and general professional service expenses. Over the past five years, these expenses have dropped a significant amount as they made up 16.1% of revenue in 2019 as compared to 10.4% in 2023. These expenses are expected to continue to decrease for the following years.



Costs of Subscription Services Revenues

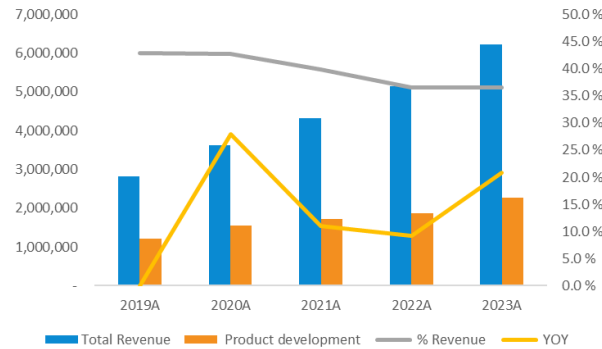


The costs of subscription

services revenues include expenses related to the hosting of Workday’s various applications, customer support, computer equipment depreciation, and infrastructure operated by third parties. As subscriptions are Workday’s primary source of income, the cost of subscription services has increased over the past five years. In 2019, these costs made up 13.5% while they made up 16.3% in 2023. On average, costs of subscription services revenue has been 15.3% the last five years. As Workday’s revenue is expected to continue to increase, it can be expected that these costs will rise as well.

is expected to continue to increase, it can be expected that these costs will rise as well.

Product Development Expenses

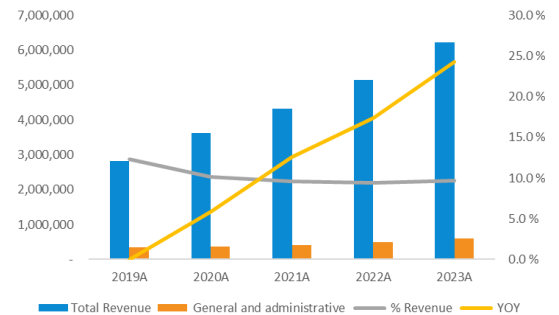


As innovation is a core value at Workday, they invest a large amount of their resources towards product development. Workday’s product development organization is responsible for developing new applications for users as well as enhancing the functionality and reliability of existing applications. They also oversee all product design, development, and testing. As Workday is competing within a competitive industry and they strive to promote creative thinking, this investment has cost Workday an average 37.7% of revenue the past 5 years. As mentioned, it can be noticed that they have gradually been spending less these past five years. In 2019, 42.9% of revenue was

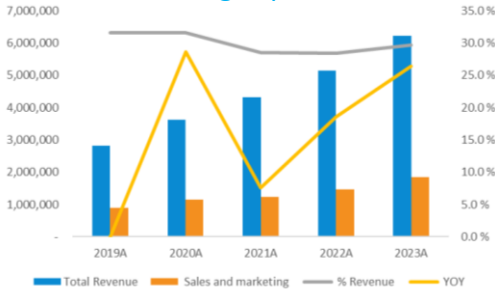
invested while 36.5% of revenue was invested this past year. Following this trend, we are expecting product development expenses to drop even more, from 37% of revenue in 2024 to 34% in 2028.

General and Administrative Expenses

General and administrative expenses increased last year as there was a higher volume of staff, causing compensation expenses to grow. Regardless of this, we still project general and administrative expenses to continue the usual downward trend as Workday begins to receive more revenue.



Sales & Marketing Expenses



Sales and marketing expenses primarily consist of employee-related expenses. This includes sales commissions, travel expenses, and marketing programs. Regarding sales commissions, new revenue contracts are amortized on a straight line basis of five years. Marketing programs are beneficial to Workday's staff as they consist of brand awareness, product marketing, advertising, and corporate communications activities. Over the last five years, sales and marketing expenses have remained between 31.6%-28.4%. For years to come, it is expected that these expenses will remain amongst this range.

Industry Overview

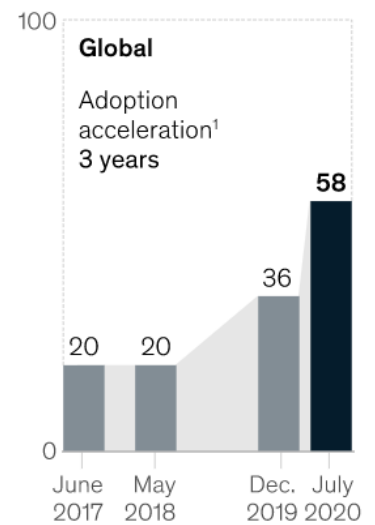
Within the technology sector, Workday exclusively operates in the software industry, which consists of companies who generate revenue through developing and selling digital software for consumer or business demands. Workday's business places an emphasis on cloud-based software, which is focused on software that is stored and operated through cloud computing. Cloud-computing tends to work on a Sales-as-a-Service basis, with companies generally offering Software-as-a-Service, Platform-as-a-Service, or Infrastructure-as-a-Service models depending on the type of product they are offering. Companies that offer business-to-business platforms like Workday tend to utilize a Software-as-a-Service model, which provides flexibility in the amount of cloud storage required based on the needs of a specific client, while also enabling greater scalability, accessibility, and cost-effectiveness.

Industry Growth

With Workday's revenue streams being so dependent on the success of their applications, external opportunities are heavily reliant on the growth of enterprise software and the cloud computing market. While cloud computing has existed since the 1960s, it has only truly become mainstream in the past 15 years and has not yet reached maturity as an industry. From 2023 through 2030, Grandview Research expects the U.S. cloud computing market, which currently stands at a size of \$101.4B, to grow at an average compound annual growth rate (CAGR) of 13.1%, while they expect the global cloud computing market, which currently stands at \$484.0B, to grow at an average CAGR of 14.1%.

Increased Demand for Digitization

The constant pressure for companies to tailor their business towards rapidly changing consumer preferences facilitates strong demand for solutions that allow for greater digitization. One factor that will have perpetual effects on this increased need for digitization is the lasting consequences of the COVID pandemic, as McKinsey research has indicated that over 20% of the global workforce could shift to hybrid remote work models, increasing the need for collaboration across digital platforms. Furthermore, in October of 2020, a survey from McKinsey found that respondents were three times as likely to suggest a majority of their business interactions with consumers digitally than they were before the pandemic began, indicating that 58% of global business interactions occurred digitally as opposed to just 20% in 2018. Before the pandemic, digitization was a trend that disproportionately affected larger corporations, as solutions that helped facilitate digitization such as cloud computing tended to be viewed as too costly and unnecessary for smaller firms. However, in 2020 and 2021, the percentage of small and medium firms becoming more digitalized was greater than the percentage of large corporations that became more digitalized. Utilizing the cloud is one of the primary ways that a firm can integrate digital platforms throughout their operations and has been shown to be far more cost effective than native enterprise software solutions for companies, allowing businesses to devote more cash to their core business. Furthermore, the Sales-as-a-Service model stabilizes revenue streams for cloud companies, as most companies who purchase cloud solutions tend to continue using the services for extended periods of time. Considering that nearly all of Workday's revenues stem from the sale of cloud applications, continued demand for digitalized services provides significant growth opportunities for Workday.



Growth of Artificial Intelligence and Machine Learning

One of the most notable trends in technology during 2023 has been an increase in both application of and discourse around artificial intelligence and machine learning. To the general public, the ever-growing prominence of artificial intelligence is most evident in the development of consumer platforms such as ChatGPT. However, arguably a more impactful trend within artificial intelligence will be the role that it plays for businesses for the foreseeable future. With cost-effectiveness being so highly prioritized in cloud computing applications for most companies, the expanding abilities of artificial intelligence serve as a catalyst to further increase efficiency. Machine learning specifically is a type of artificial intelligence that enables programs to mimic the way that humans learn, but at a much faster rate and with much larger sets of data, allowing for greater accuracy when predicting outcomes for businesses. Not only can artificial intelligence be used instead of labor, but it also helps to identify redundancies within data centers, increasing the amount of cloud storage that companies have at their disposal. Artificial intelligence can also be used to enhance automation and productivity for a cloud service user, as it can schedule and optimize resource allocation within a cloud. Ultimately, the development of artificial intelligence will enable greater insights for companies through data mining, which can enable more specified market segmentation, optimal product and service prices, and more efficient inventory management and purchasing. Grandview Research suggests that the artificial intelligence market could grow at an average CAGR of 37.3% between now and 2030, when it would reach a size of \$1.8 trillion.

Shift Towards Low-code Development

Within the software industry, low-code and no-code development have been increasing in popularity over the past few years. Through this, the code is meant to be more web-based, rather than code-based. With low-code development, developers can build applications with minimal coding as they utilize pre-built drag-and-drop interfaces. With less coding requirements, the industry could continue to see new entrants flow in as there is an opportunity to gain clientele while utilizing minimal resources. As these low-coding interfaces also help to create customizable options for clients, the trend is expected to continue through 2023 and so on. Many companies within the industry have jumped on this low-code development, including Workday. Workday Extend is an extension that allows Workday's clients to create their own application through the use of



low-code development. With the use of drag-and-drop options, clients are able to build the HCM, finance, and analytic applications they want to utilize for their business.

Low-code/No-code vs Custom App Development



Industry Disruptors

Cyber Security Attacks Pose a Threat

Just as AI is substantially growing, so is the ability for users to data mine and hack accounts. Although technology is becoming more advanced and stronger protected in general, users are finding sneakier ways to breach company data and still client files. If clients were to have their information stolen, this could negatively impact the industry as it could turn many potential new clients away. Without the protection of user data, the industry is not able to flourish as it does.

AI's High Complexity Causes Difficulties



As AI Integration continues to grow within existing operating systems, its high complexity can threaten the performance of the software industry. As a whole, AI is very complex and requires extensive expertise. Although AI is growing in demand and popularity, it is difficult to supply enough experts to match this substantial growth. Furthermore, AI systems are more complicated than a typical website interface, leaving room for errors to occur. While the industry is continuing to exponentially grow, their ability to keep up with technological advances is put into question.

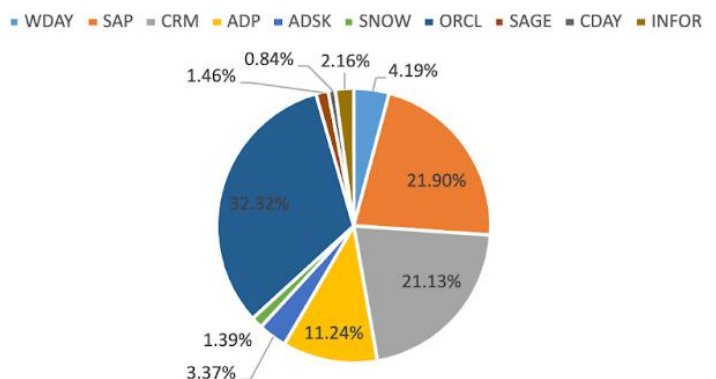
Firms Must Adapt to SaaS Demand

Being part of the technology sector that is ever changing, the software industry has to adapt to consumer demand and preferences. As of late, software as a service (SaaS) has reshaped the industry. Due to SaaS allowing for better application ease across platforms and sites, this is becoming an expectation for consumers. As SaaS becomes more common, consumers are becoming accustomed to this ease of conducting business, making it most people's preference. As consumers are wanting SaaS, companies within the software industry must adopt new strategic plans to implement this demand. This disrupts the industry as a whole as they all need to adjust their applications in order to meet consumer expectations. If a company fails to effectively implement SaaS, they could lose clients to those that have succeeded. With a higher want for SaaS, it can make room for shifts of power within the industry.

Market Share

The biggest players in the enterprise software industry include SAP, Oracle corporation, and Microsoft. SAP is the third largest enterprise software company in the world. SAP has noted to have seen significant growth as revenue increased by 4.6% in 2021 compared to the previous year. Many of Oracle's biggest customers are banks, retailers, telecom operators, and health insurance companies. With the help of acquisitions and buy-outs, Oracle has established themselves as a multi-billion-dollar company. Microsoft is also greatly established as they are one of the world's largest enterprise software companies with yearly revenue going into the billions and offer software for nearly every industry. Smaller, but still significant players, include Sage, Infor, Inc., Automatic Data Processing (ADP), Salesforce, Inc., Autodesk, Inc., Snowflake, Inc., Ceridian HCM holdings Inc., and Paycor. Sage is significant as they are the largest supplier of enterprise resource planning for small businesses. They also have a competitive edge as they have a foothold in the

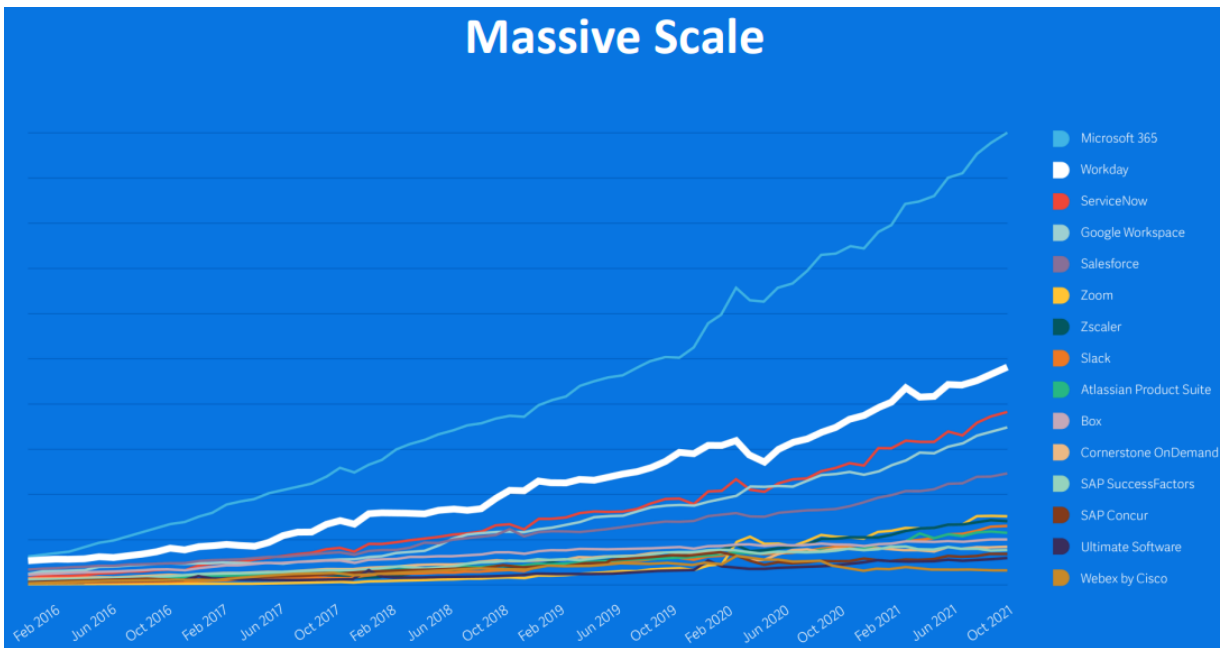
Market Share



construction industry as they offer both “construction and real estate” and “contractor” ERP options. Infor, Inc. has been a cloud-computing leader since 2010. With the help of innovation and acquisitions, Infor provides software to 68,000 organizations worldwide. ADP serves more than 600 of the Top Fortune 1,000 companies across the globe, making them a large threat. Salesforce, Inc. has been continuously growing while being recently named one of Fast Company’s Most Innovative Companies in the World. Autodesk, Inc. and Snowflake, Inc. experience similar revenues as that of Workday, making them closer competitors in comparison to the industry giants. Ceridian HCM holdings Inc. holds a smaller share, but is still noted as a competitor within Workday’s 10-k.

To find Workday’s market share in comparison to their competitors, revenues for Workday’s 10 largest competitors for the most recent fiscal year were reviewed. Although we wanted to note Microsoft as a competitor in the software industry, we did not include Microsoft in our market share calculations. As Microsoft receives significantly more revenue than any other company, and is far more diversified than any other player, their market share was originally calculated to be 57.91%. Therefore, Microsoft was removed to better represent the enterprise software industry without a major outlier. Through this, it was found that Workday holds a 4.19% market share as compared to their competitors within the enterprise software industry. To no surprise, Oracle and SAP hold the largest shares of 32.32% and 21.90% respectively.

It should be noted that while total revenue places Workday significantly behind major players such as Oracle and SAP, in terms of worldwide SaaS ERP revenues, Workday ranked first worldwide, with a market share of 19.1%. Furthermore, Workday ranks second only to Microsoft among major software companies in terms of unique users. Considering that companies who have achieved similar market shares tend to have far larger market capitalizations, Workday appears to be outperforming their current scale.



Unique Users per Software Application 2016-2021

Competitive Analysis

A strengths, weaknesses, opportunities, and threats (SWOT) analysis was conducted in order to evaluate Workday’s competitive position. Through a SWOT analysis, internal factors are considered for strengths and weaknesses while external factors are considered for opportunities and threats.

SWOT Analysis: [\(Explanation of Model\)](#)

Strengths



- Workday values their employees and is known for having excellent company culture. For the past three years, between 2021-2023, Workday has been placed in the top 100 best places to work by Glassdoor Awards
- Workday extensively invests into their workforce, incorporating employee training and developments to provide the best service for customers
- Workday has a history of successfully performing in newly entered markets
- Have a strong and diverse board of directors who can provide extensive information regarding the healthcare, technology, and financial sectors
- Workday does well at creating partnerships (ex: Salesforce) and identifying complementary firms to merge/acquire as means to streamline their operations
- Maintain a strong and reliable distribution network allowing them to reach global markets

Weaknesses

- Customer relationship management (CRM) is a significant portion of the cloud-based software industry, yet Workday does not operate in it
- With their first IPO in 2012, Workday can be viewed as a late market entrant, making it harder to establish themselves amongst major industry competitors
- Product gaps allow for competitors to enter the market more easily
- Current asset and liquidity ratios suggest Workday could be better at utilizing their excess cash

Opportunities

- Workday has the ability to establish a strong clientele within the healthcare sector with the help of their recent Industry Accelerator program
- Low inflation rate helps Workday maintain market stability
- Have a strong customer retention with a gross retention over 95%
- Create custom plans, setting themselves apart from competitors

Threats

- As Workday is a public company with global operations, they must follow the jurisdiction of federal, state, foreign, and local laws. By offering AI machine learning, privacy and data protection, intellectual property, and more, they must comply with all of these governmental regulations. If Workday fails to comply, this could impact their business operations and ability to service
- Highly competitive market as profit stability has encouraged new entrants
- Insiders have refrained from buying any company stock this year and have been selling instead
- Workday could be susceptible to the hacking of their information technology systems, resulting in unauthorized access to client data, harming client retention

Porter's Five Forces: [\(Explanation of Model\)](#)

In the analysis of Workday, a Porter's Five Forces analysis was used, which helps to determine how different industry and company-specific factors affect how significant the competition Workday faces is, and ultimately, the success of their operations.

Threat of Substitutes | High

Because the cloud-based enterprise software industry is so competitive, there is a relatively high degree of product similarity between companies within the industry. However, Workday's model allows them to differentiate themselves from some competitors through product flexibility and tailoring to specific businesses, but companies such as SAP offer similar benefits within their platform. Furthermore, it is entirely possible that companies with a dominant market share within the cloud-



based software industry could expand their business and offer rival products against Workday's. Ultimately, the top ERP vendors provide comprehensive services that cover all bases in HCM and financial services, so the main factors that differentiate them are brand equity, pricing, ease of implementation, and user-interface.

Supplier Bargaining Power | Medium-Low

Because Workday does not actually require any inventory for their products, the main source of supply for Workday is labor, which they require for the development of their software. While the labor market has been tight for software and artificial intelligence companies, Workday still has significant leverage in choosing suppliers, as there are far more suppliers than buyers, and there is a relatively low amount of specialization required for Workday's software applications.

Threat of New Entrants | Medium

In terms of new companies entering the industry, it takes a significant amount of capital, product development, and brand equity to establish a strong position within the cloud-based software industry. This is because Workday and their competitors rely heavily on business-to-business selling and deal with a high level of complexity in the products and services that they offer. Because they are not selling a one-size-fits-all product, integrating their product offerings can require intensive labor and focus, which is more difficult for newer, smaller firms to accomplish. However, there does exist the threat of highly diversified major companies, such as Amazon or Microsoft, using their purchasing power to move into the industry.

Buyer Bargaining Power | Low

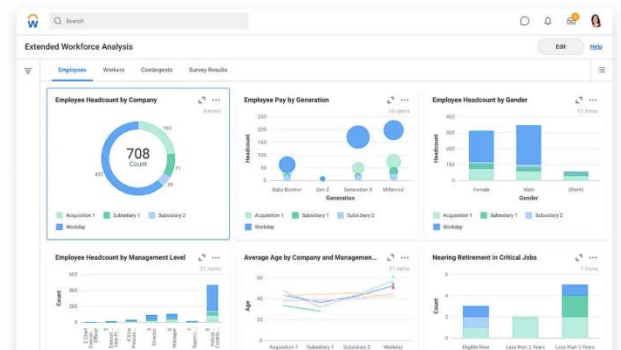
The high complexity of enterprise and cloud-based software's can make it extremely difficult for companies to integrate them without assistance from vendors, which can lead to significant costs being incurred during implementation; in fact, fees related to this comprised 10% of Workday's FY23 revenue. Because of this, it is extremely costly to switch from one enterprise software provider to another, which gives buyers very little leverage once they have contracted with a seller.

Competitive Rivalry Amongst Sellers | Medium

In general, the software industry sees less differentiation between products than one would expect to see in a sector such as Consumer Goods and it is generally easier for newer firms to quickly attain market share in the software industry due to lower need for inventory and equipment. This places pressure on software companies to provide a unique value proposition that allows them to find their niche within the market. However, for cloud-based software companies, there are greater barriers to entry due to the amount of labor and capital that is required to integrate operational cloud solutions. Furthermore, buyers and suppliers are not significant causes for concern within the industry. Ultimately, Workday is an example of a firm that has succeeded in growing its scale and has relied on their strong reputation to obtain a stable client base that provides consistent revenue. Therefore, while they are pressured by competitive rivalry, it is not as extreme as one would expect for other software companies.

Financial Analysis

Our financial analysis of Workday consists of the inclusion of several ratios associated with the DuPont Analysis method, as well as several ratios that assess the health of the company's balance sheet and profitability.



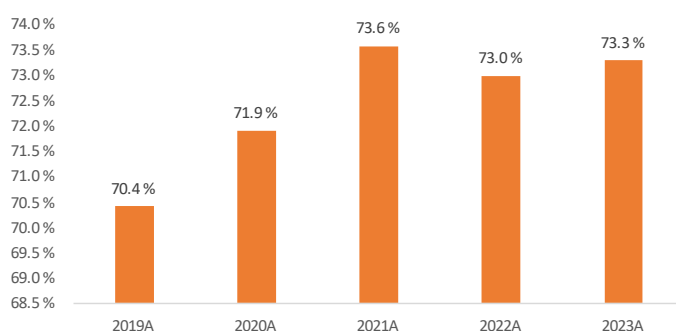
DuPont Analysis

The DuPont analysis consists of several financial ratios that are calculated for each of the past five fiscal years for Workday and provide insight into the success of their operations and overall financial health, contextualizing their results through the utilization of ratios as opposed to raw data. For Workday, because their business model has been so focused on revenue growth and attaining market share, the ratios most important to the company are related to the efficiency of their revenue growth and how their financial health has been maintained during its duration.

Gross Margin

Workday's gross margin is calculated as the quotient of their gross profit (revenue minus cost of sales) and their total revenue for a fiscal year. This is a particularly important metric for Workday because it illustrates how efficient the company is at selling its main product offering. Workday saw gross margins of 70.4%, 71.9%, 73.6%, 73.0%, and 73.3% from FY19-23, respectively. These margins are strong and indicate that the company has experienced marginal improvements in the efficiency of their sales, but the high consistency within the values indicates that their current business model may not enable opportunities for positive EBIT through reducing their cost of sales.

Workday Gross Margin FY19 -23



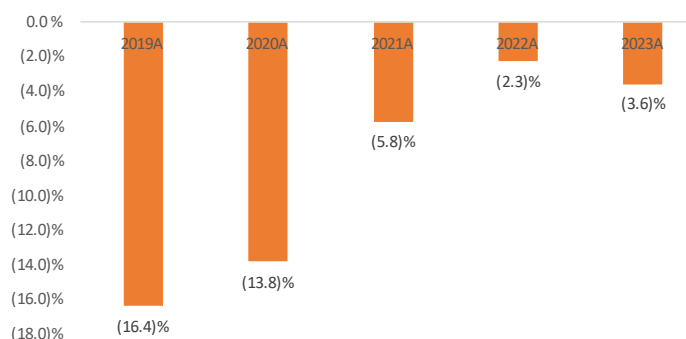
Operating Margin

Workday's operating margin is found as the quotient of their EBIT, which represents their earnings from their core business operations and total revenue. This metric represents how profitable their core business is before income is received or lost from interest and unrealized gains on investments.

Workday achieved operating margins of -16.4%, -13.8%, -5.8%, -2.3%, and -3.6% during the past five fiscal years, suggesting that even though their gross margin has remained the same, the firm has been able to reduce General and Administrative, Product Development, and Sales and Marketing Expenses in order to improve their operating earnings. It should be noted

that this margin decreased from FY22 to FY23 as a result of the company taking on too much labor, but it is unlikely that this trend will continue, as the company announced plans to slim its workforce by 3% near the end of FY23.

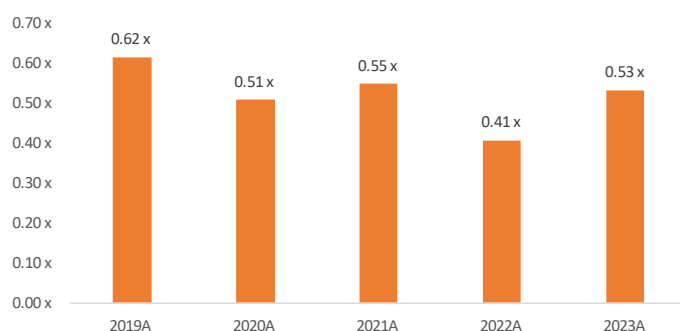
Workday Operating Margin FY19 -23



Total Debt to Equity

Total Debt to Equity is calculated as dividing Workday's total debt, both short term and long term, by the book value of equity as listed in their balance sheet. Workday has seen a Debt-to-Equity ratio of 0.62x, 0.51x, 0.55x, 0.41x, and 0.53x over the past five years. Workday has maintained a relatively consistent level of debt as compared to their equity over the past five fiscal year and tends to use debt relatively sparingly considering the rapid revenue growth they have achieved. Workday has not indicated plans to grow their level of debt significantly in the near future, but did issue senior notes

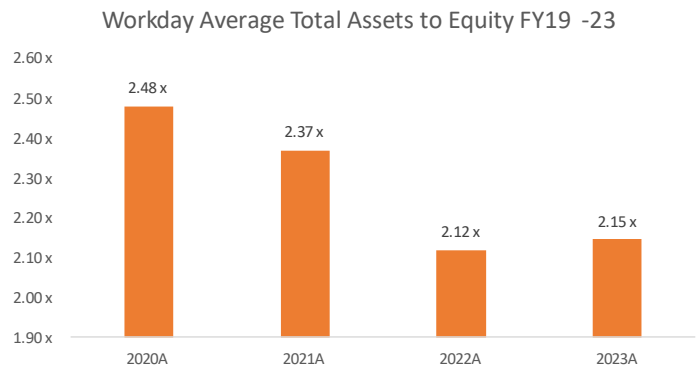
Workday Total Debt to Equity FY19 -23



maturing in 2027, 2029, and 2032 at a value of \$3B during FY23, which led to the increase from 2022 to 2023.

Leverage Ratio (Asset-to-Equity Ratio)

The Leverage Ratio is calculated by dividing the average of Workday’s total assets over a two-year span by the total equity of the company in the latter of the two years. This ratio is important because as assets increase, so too should total equity, so a higher asset-equity ratio indicates that the company’s assets are not covering liabilities well. Workday saw Leverage Ratios of 2.48x, 2.37x, 2.12x, and 2.15x from FY20-FY23, respectively. Despite having a relatively low debt-to-equity ratio, Workday still experiences a Leverage Ratio above 2.0, which may raise concerns for some that their liabilities are not being covered well by their assets. However, Workday records several billion dollars of unearned revenue as a current liability each year due to their business model revolving around securing long term contracts with corporations to earn stable revenue, thus inflating the value of their liabilities. As long as Workday can continue meeting its performance obligations, the large amounts of recorded unearned revenue do not signify any fundamental weaknesses within the company.



Valuation

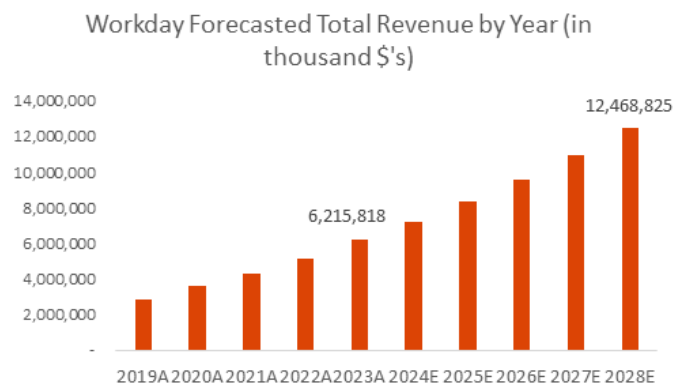
In our approach for the valuation of Workday, we felt it best to use an aggregation of several different metrics that reflect different schools of thought for a fundamental analysis. The models that were used in valuation include Discounted Cash Flows (DCF), a Relative Model, and a Historical Model. The rationale behind each of these metrics will be discussed below.

Discounted Cash Flow (DCF) – 50%

Within fundamental analysis, a DCF model was used in order to calculate an intrinsic value for the company based on the present value of the cash flows that they are projected to earn over the next five years. Workday has not consistently earned positive net income or EBITDA over the past five years, so we felt it to be most appropriate to utilize a model that contextualized their price to their revenues, which has been a significant focus for the firm. Additionally, to accurately determine how much the company is actually worth, Enterprise Value (EV) was calculated from the present value of their future cash flows and their terminal value, and then derived into equity value. Based on these factors, a model utilizing an EV/Sales multiple was chosen for the DCF. Ultimately, the DCF model resulted in an intrinsic value of \$233.02 per share, and a Margin of Safety of 22.0%.

Revenue

When forecasting revenue for Workday, several factors were taken into consideration, including management guidance, Workday’s historical growth, and internal and external growth catalysts. Management guidance forecasted 17-18% revenue growth for FY24, which would be a slight decrease from the 20% growth that they achieved in both FY22 and FY23. Furthermore, Workday has established a reputation for slightly outperforming their forecasted revenue benchmarks over the past three years, as Workday has recorded marginally greater subscription revenue than the upper bound of their predictions for FY21, FY22, and FY23. Based on this, within the DCF, subscription revenue was forecasted to grow 17% YOY in FY23, followed by growth of 16.5%, 15%,



14.25%, and 14% for FY24-28, respectively, reaching segment revenue of \$11.4B in 2028. When conducting fundamental analysis, we felt it best to maintain a conservative approach that accounts for risk in order to fully assess whether a company can be an attractive investment even if they are unable to fully reach lofty expectations, so the lower end of Workday's revenue guidance for FY24 was used as a start point. Workday has experienced strong revenue growth of over 20% during the last two years, but as the company's focus shifts towards profitability, they will begin to be slightly less concerned about expanding its revenues as they become more efficient in their operations. Because of this, we expect Workday's revenue growth to remain consistent, but to taper off as the company continues to mature.

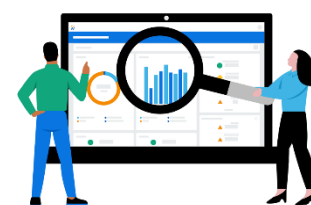
Workday's professional services segment has decreased in both YOY growth and as a percentage of total revenue since FY19, and as Workday focuses less on acquiring new clients and instead on strong retention and upselling to its existing base, it is reasonable to assume that the growth of this segment will taper off faster than the subscription services segment. In alignment with our more conservative approach, despite 9.5% growth in segment revenue in FY23, we forecasted growth of 7%, 6.25%, 5.5%, 5%, and 4% for FY23-28, resulting in 2028 segment revenues of \$849.5M.

Cost of Sales

Workday's cost of sales is partitioned the same way their revenues are, recognizing costs incurred for subscription services and professional services separately. Historically, Workday's cost of subscription services has increased as a percentage of revenue, while professional services has decreased as a percentage of revenue. This is largely due to a shift in Workday's prioritization of adding new clients, which incurs high costs to organize and integrate their applications with a new company, to maintaining a high rate of revenue retention and upselling to their current customers. We forecasted this trend to continue over the next five years, resulting in Cost of Subscription Services being forecast as 16%, 16.4%, 17%, 17.35%, and 17.5% from FY24-28, and Cost of Professional Services being forecast as 10%, 8.75%, 8%, 7.5%, and 7% of revenue. This resulted in a gross profit margin, growing to be 75.5% by FY28.

Operating Expenses

Operating costs for Workday are separated into Product Development, Sales and Marketing, and General and Administrative costs. Over the past five years, each of these expense categories has decreased as a percentage of revenue, as Workday continues to benefit from economies of scale. In FY23, these expenses all actually increased as a percentage of revenue as Workday's expenses were inflated by a higher than anticipated headcount. As Workday is planning to cut around 3% of their Workforce, following suit behind many other major technology companies, we forecasted each of these expense categories to begin decreasing as a percent of revenue again. Our forecasts resulted in total Operating Costs (including cost of sales) reaching under 100% of revenue by FY25, and a mark of 94.6% of revenue by FY28.



Product Development Costs

With Workday's main value proposition being their unique business model and their ability to create a cohesive suite of applications for a client, they have indicated that they expect to continue investing heavily in Product Development. These Product Development costs were forecasted to be 37%, 36%, 34%, 33.5%, and 33% of revenue from FY24-28. This was based on the historical trends of these costs.

Sales and Marketing Costs

Within their financial statements, Workday has indicated that they expect Sales Marketing costs to continue increasing as the success of their direct selling is heavily dependent on acquiring contracts with new companies. While we expect these expenses to continue increasing over the next five years, we expect a decrease as a percentage of revenue as they continue to benefit from economies of scale. For the next five years, sales and marketing costs were forecasted to be 30%, 28.5%, 28.2%, 27.75%, and 27% of revenue from FY24-28.



General and Administrative

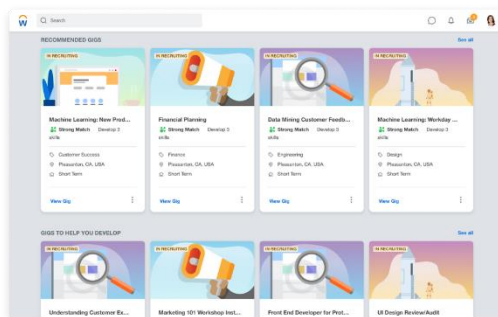
General and Administrative costs have decreased as a percentage of revenue over the past five years. Because these costs are directly related to the scale of the business, we expected General and Administrative costs to slightly grow, then decrease as a percentage of revenue as Workday's cost efficiency improves. General and Administrative costs were forecasted to be 9.5%, 9.3%, 9.25%, 9.2%, and 9.1% of revenue from FY24-28.

Provision for Income Taxes

Workday has not paid a consistent level of income taxes over the past five years. In FY22 specifically, Workday saw a major tax benefit of around \$13M as a result of domestic tax benefits related to the allowance from business combinations and international tax policies in certain countries that provide benefits for operating losses. Additionally, Workday records significant accruals, interest related to taxes, and penalties that they incur, which can skew their provision for income taxes in a given year. However, FY23 saw their tax rate return at a more normal level, and several outside analysts have forecasted a tax rate of between 20% and 25% over the next several years. Based on this, we selected a terminal tax rate of 22%, and applied this to each of the next five years of Workday's EBIT.

Cash & Cash Equivalents

Workday's cash and cash equivalents consist of investments within U.S. agency obligations, corporate bonds, U.S. treasury securities, commercial paper, and money market funds. These equivalents are provided by Workday's operating activities, unbilled amounts for remaining subscription agreement terms, and borrowing capacity when needed. Over the past five years, cash and cash equivalents typically consist of approximately 23.6% of current assets, while experiencing high rates of 28.8% and 29.4% during 2021 and 2022, respectively, due to expansion efforts. Since this, cash and cash equivalents have dropped back down to be 23.3% of current assets for the fiscal 2023. As Workday is expected to gain a larger clientele, this will increase their unbilled subscription amount, contributing to an increase in cash and cash equivalents. Due to this expected increase, we wanted cash and cash equivalents to reflect a growing percentage from 24% up to 26%.



Marketable Securities

Workday's marketable securities are also primarily held for working capital purposes to invest into sound funds and investments. Come fiscal 2023, marketable securities grew to comprise 52.2% of current assets as Workday purchased \$7.1 million securities during the year. This is a substantial amount compared to the previous year's purchases of \$2.8 million. Although Workday has not addressed their plans for marketable securities this year, we believe that fiscal 2023 was an irregular purchasing year. Therefore, we are predicting that they will see a range between 44-48% as they will be working towards improving their financials, rather than purchasing. We forecasted marketable securities values at 45.8%, 44.8%, 44.0%, 44.8%, and 48%.

Depreciation & Amortization

Depreciation and amortization has slightly decreased over the last four years, dropping from 7.6% to 5.9% between fiscal 2020 and 2023. In regards to depreciation, Workday is looking to increase the useful life of their data center equipment by 3 to 5 years, causing a change in Workday's accounting estimates. Due to these changes, effective beginning fiscal 2024, it is predicted that depreciation expenses will decrease by \$93 million for the year. As amortization is also a factor, we wanted to consider this by forecasting depreciation and amortization to be 5.9% of revenue for 2024. After this year, we set our forecasts to gradually reflect the previous 5-year median of 6.7%.



Capital Expenditures

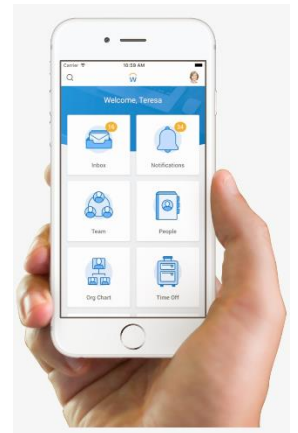
The majority of Workday's Capital Expenditures are related to projects relating to acquiring land and building for office space and data centers, which are important to facilitate successful cloud solutions. Additionally, because marketable securities are considered long term investments, purchases and proceeds from sales are included in the calculation. While Workday is likely to consider making investments in Capital Expenditure over the next five years, we do not anticipate the rate at which it grows to match the rate of growth for their revenues. Furthermore, Workday completed a major project related to their office space in FY23, but will likely not require as significant need to expand in the near future considering their recent job cuts. Because of this, Capital Expenditures were forecasted to be 4.5%, 4%, 4%, 3.75%, and 3.5% of revenue from FY24-28.

Beta

When selecting a Beta, the four-year daily beta of 1.20 was selected, which had a correlation of 63.1% and an R-Squared of approximately 40%. There were other, higher betas that could have been selected to accurately represent the company, but we felt the four-year daily beta was appropriate due to the high number of observations that were considered during its calculation. We also wanted to take into account the lower Bottom-Up Beta, which is the weighted average of the betas of Workday's competitors, as we believe that the market will begin to treat Workday more similarly to its competitors once they become more mature and achieve positive earnings. As the Bottom-Up Beta calculated an industry average beta of 1.06 and Yahoo Finance suggests Workday to have a beta of 1.28, we found our four-year daily beta of 1.20 to be a sound selection.

Terminal Value Calculations

Within the EV/Sales model, the Terminal Growth Rate sits at approximately 7.3%. While we believe that Workday has many significant opportunities to achieve impressive growth in the future, this value sits above what our actual expectations of the company are in the future. However, the EV/Sales model is most appropriate for a company like Workday as companies in their industry tend to trade at prices that are far less correlated to their EV/EBITDA multiples, which would making using that model far less accurate. This is an implied terminal growth rate, calculated using forecasts for Workday's next five fiscal years, a terminal value is calculated from an exit multiple and our total revenue forecast for FY28. Using an exit multiple method has limitations in calculating a terminal growth rate, as it assumes the growth rates of cash flow throughout the time period in the model are consistent for the company after the end of the forecasting period. Workday is a company that is in a period of significant growth and is likely to see massive growth in free-cash flow as they become more profitable over the next five years. This growth is unlikely to occur perpetually, but the model is unable to consider this factor, resulting in an inflated terminal growth rate. Ultimately, this does not detract from the accuracy of the model; if Workday is able to achieve their forecasted revenue by FY28, the calculated terminal value and enterprise value will be accurate, the fundamental analysis will be valid. Still, in order to account for some of the risk involved with such a high terminal growth rate in the valuation, a more conservative approach was taken in the relative model.



Capital Asset Pricing Model (CAPM) & Weighted Average Cost of Capital (WACC) Presumptions

Within the CAPM, the most recent equity risk premium found on NYU Stern of 5.9% was used, while the rate found on 20-year bonds (which are currently higher than 30-year bonds) issued by the U.S. Treasury was used, which currently sits at 3.8%. For the WACC, it was found that Workday's corporate bonds were most recently rated at BBB, for which long term yields are currently approximately 5.5%. The CAPM was used to calculate a WACC for Workday, resulting in a Cost of Equity of 10.9%, a Cost of Debt of 5.5%, and a Cost of Capital of 10.5%



Relative Model – 30%



As aforementioned, we feel that the EV/Sales model results in an accurate representation of Workday’s fundamental value, but decided to account for risk concerns related to the high terminal growth rate with the relative model. Because of this, we felt that it was best to be as conservative as possible in our relative model

valuation. Within the cloud-based software industry, the price of a company’s stock tends to be heavily dependent on the sales that they are achieving, as most companies in the market have not yet reached maturity and are not yet focused on positive net income. Based on this, the Price/Sales and EV/Sales models were weighted at 50% each within the Relative Model. The companies that were included in the model were Salesforce (CRM), Automatic Data Processing (ADP), Paycor (PAYC), and Oracle (ORCL). Oracle, ADP, and Salesforce were each given approximately a 30% weighting within the model.

For Workday’s HCM products, from which they derive a significant amount of revenue, their main competitors are Oracle and SAP. Oracle, who comprises 30% of the model, is a much larger company than Workday, and have greater market share overall in cloud-based software, but we feel that the market is likely to treat Workday similarly to how it treats Oracle in the next couple of years, as they are both negatively earning companies whose focus is mainly on the growth of revenue. Oracle records a negative book value of equity, which prevents them from recording equity ratios, but they most recently had a beta of 1.0, a Return on Assets of 7.3%, and a Market Cap of \$260.45B. SAP was not weighted in the model due to their notably high EV/Sales ratio of 20.1x, which we felt was a mark that is unreasonable for Workday, who trades at a ratio of 7.7x. Workday has not traded at a multiple above 15.0x within the past five years, and we do not foresee them trading at such a multiple in the future, so we felt it was not appropriate to include SAP in the model.

Company	ERP	HCM	ATS
Walmart	SAP S/4 HANA	Workday HCM	Workday Recruiting
Exxon Mobil	SAP S/4 HANA	SAP HCM (HR)	SuccessFactors Recruiting
Apple	SAP S/4 HANA	SAP HCM (HR)	In-House ATS
Berkshire Hathaway	Oracle ERP Cloud	Oracle HCM Cloud	Oracle Taleo
Amazon.com	In-House ERP	Workday HCM	In-House ATS
UnitedHealth Group	Oracle E-Business Suite	Oracle HCM Cloud	Oracle Taleo
McKesson	SAP S/4 HANA	Workday HCM	Workday Recruiting
CVS Health	SAP S/4 HANA	Workday HCM	IBM Kenexa BrassRing
AT&T	SAP ERP ECC 6.0	Workday HCM	Oracle Taleo
AmerisourceBergen	SAP S/4 HANA	Workday HCM	Oracle Taleo
Chevron	SAP S/4 HANA	Workday HCM	SuccessFactors Recruiting
Ford Motor	SAP S/4 HANA	Oracle HCM Cloud	IBM Kenexa BrassRing
General Motors	SAP S/4 HANA	Workday HCM	Oracle Taleo
Costco Wholesale	SAP S/4 HANA	SAP SuccessFactors HCM	Oracle Taleo
Alphabet	SAP S/4 HANA	Workday HCM	Google Hire

Source: Apps Run The World, September 2022

Paycor is the only company included in the model that currently has a smaller market capitalization than Workday, but they compete with Workday in HCM, and are another example of a cloud-based software company that is more mature than Workday. Paycor mainly competes with Workday in reaching mid-sized clients and does not have as strong a presence among firms of a larger scale. This factor, along with their smaller market capitalization, resulted in Paycor only comprising 10% of the model. Paycor has a beta of 1.41, a Debt/Equity ratio of 5.9%, Return on Equity of 27.1%, Return on Assets of 6.7%, and a Market Cap of \$18.85B. While Salesforce and ADP do not serve as direct competitors to Workday in their HCM, FINS, or talent recruitment software, they were weighted at 30% each because they both have similar business models to Workday and serve as strong examples of how the market treats cloud-based software companies closer to reaching maturity. We believe it

is reasonable to assume that Workday will begin trading more like these firms in the near future. While Workday may not be considered as much of a growth stock as newer companies in the industry, they have historically traded at higher sales ratios than Salesforce and ADP. We believe that as Workday’s operational efficiency improves and their revenue continues to grow, their multiples will slowly taper off and become closer to those of Salesforce and ADP. Salesforce has a beta of 1.24, a Debt/Equity ratio of 25.1%, Return on Equity of 0.4%, Return on Assets of 1.2%, and a Market Cap of \$198.92B. ADP has a beta of 0.82, a Debt/Equity ratio of 114.4%, Return on Equity of 78.3%, Return on Assets of 7.1%, and a Market Cap of \$89.93B.



Ultimately, using the Relative Model views Workday through the lens of them trading like a cloud company that is becoming more mature in the next year or so, which we feel is an approach that is more conservative, and accounts for risk involved with the DCF. This resulted in an intrinsic value of \$175.28 per share and a Margin of Safety of -8.26%.

Historical Model – 20%

The historical model takes a somewhat opposite approach to our methodology within the relative model: while our relative model was more focused on how we believe the market will begin to treat Workday's stock in the future, the historical model applies past ratios to future expected sales. The reality of the situation is that over the next year, Workday will likely trade somewhere in the middle of these two perspectives, so we felt that incorporating both models was valid. In order to maintain consistency between the historical and relative models, Price/Sales and EV/Sales were both weighted at 50% of the model. Five-year data was used in the model, as Workday's capital structure and business strategy has remained relatively consistent during the previous five fiscal years. Over the past five years, Workday has traded at a high price P/S of 13.3x, 14.2x, 14.2x, 15.2x, and 11.2x, and a high price EV/Sales of 13.4x, 14.3x, 14.1x, 15.0x, and 11.3x from FY19-23. When applying these ratios to our expected Sales/Share of 27.2 for FY24, an intrinsic value of \$264.73 per share and a Margin of Safety of 38.57% was calculated. Because we felt that our modeling outside of the DCF should account for any risk incurred by the DCF valuation, the more conservative relative model was weighted 10% higher than the historical model, which provides a more bullish outlook on Workday.

Catalysts for Long-Term Growth

In our research, we have identified several catalysts for long-term growth. With Workday's ability to achieve GAAP profitability, establish more clientele within the healthcare sector, an increased demand for AI, and international expansion, we believe there is great potential for Workday to continue to maintain strong growth while improving their financial health.

Ability to Achieve GAAP Profitability with Appointment of Carl Eschenbach

Since Workday's inception in 2005, they have experienced substantial growth as new customers subscribe to their services. Despite this growth, Workday has a history of GAAP operating losses as Workday has been investing funds into certain areas of their business in an effort to sustain their continued near-term revenue growth. For the future, Workday predicts that their expenses will decrease over time as they experience economies of scale through their increased customer base. Expenses have already been decreasing as a percentage of revenue over the past five years in product development, general and administrative, and sales and marketing expenses. Considering the major players that already existed within the enterprise software industry when Workday was organized, their business model has not been focused on operating efficiency, rather on obtaining a strong user base and growing its revenues exponentially. Now that Workday has achieved such a strong base, achieving GAAP profitability can become a priority, as they will benefit from economies of scale and continue to see their expenses decrease as a percentage of revenue over time. Workday has been free-cash positive in each of the past three years according to both GAAP and non-GAAP accounting principles and are expected to grow their FCFF consistently over the next five years. Salesforce is an example of a company whose ability to achieve strong operating cash flows and positive income has markedly improved investor sentiment, as their share price rose around 20% after reporting Q1 earnings. Considering that investors are likely to treat Salesforce and Workday similarly, if Workday can follow suit, their share price could jump as well.



While Workday's history of negative GAAP net income may not inspire confidence in their ability to achieve confidence in the near future, there is a clear roadmap for the firm to follow. After years of focusing on growing their userbase, Workday's achievement of serving 50% of the Fortune 500 and 25% of the Global 2000, many of whom through long term contracts, means that the company is reaching a point where they can begin to balance growing their market share with financial health. As the need to pursue new client additions decreases, and upselling takes up a greater portion of their revenue, the costs

incurred with each existing client will only decrease over time in the absence of labor and capital required for integration. In addition, the number of applications that each new client purchases has steadily increased each year over the past eight years: in FY15, the average new client purchased six Workday modules, while in FY23, the average new customer purchased nine modules. This means that net profit per client will increase for both new and existing users over the next five years. Additionally, the greatest cost that Workday has incurred over the past five years has been wages and stock-based compensation for employees, which has been the main differentiator between GAAP profitability and non-GAAP losses, as intensive labor is required for product development and selling. While Workday cutting around 3% of their staff due to macroeconomic factors may raise concerns, it may also be an indicator that the company is reaching its critical mass. When this critical mass is reached, margins will drastically increase, as costs for labor will no longer grow at a rate that rivals the growth of their revenues. Overall, the culmination of these factors highlights a strong probability of GAAP profitability in the next one to two fiscal years.

A major catalyst that could enable this possibility is the appointment of Carl Eschenbach, who was recently named co-CEO with Aneel Bhusri and who will take over as the sole CEO after FY24 ends. Eschenbach has a strong reputation in the technology sector; he served as president, COO, EVP of global field operations, and CFO of VMware from 2002 through 2016, during which he helped grow VMware's revenues from \$31M to \$7B, and their market capitalization to \$40B after their initial public offering in 2009. Eschenbach also serves as a partner at Venture Capitalist company Sequoia Capital, where he has served as a member on the Board of Directors for several cloud-based companies, including Snowflake (SNOW, market cap of \$47.2B) and Palo Alto Networks (PANW, market cap of \$58.5B). The appointment of Eschenbach, a reputable, experienced executive who has demonstrated the ability to grow a company's market capitalization, ensures that Workday will benefit from strong leadership in the short and long term.

Early Entrant in Implementation of AI Platforms & ECM

As the use of AI continues to grow in popularity and integrates into our daily lives, the way that it is transforming how business is conducted is far different than perceptions held by the general public, for whom the increased prominence of AI and ML is most visible through consumer platforms. Co-CEO, Eschenbach, has commented on how companies who have the opportunity to incorporate AI and ML are at a critical point, as while it is extremely costly to utilize the technology as part of a business, those who do not do so now will be laggards in joining the expansion of a rapidly growing market. In this, Workday has been an innovator, as many of their applications are now built to incorporate AI and ML for demand forecasting and business insights. For Workday, centralizing AI and ML in their product offerings contributes to their unique value proposition. Demand is increasing right now for AI-powered ERP technology; Workday's Skills Cloud, for example, holds an attach rate greater than 85%, and the fastest growing module is the Talent Optimization Platform, which is heavily dependent on ML. Greater implementation of AI and ML into an ERP platform across a business increases efficiency of operations for a buyer, as their need for labor decreases, and their cost efficiency increases. The greater the lead that Workday establishes in AI and ML in their software, the more companies will flock to their platforms, thus driving strong revenue growth.



Carl Eschenbach has stated that he expects the cost curve of using AI solutions to slope downwards over time, just as cost curves have for all new transformative technologies in the past. Workday has already incurred great costs to build AI and ML into their applications, which contributed to their higher expenses in FY23, and are now fully invested in the growth of the industry. A key difference between Workday's approach to AI as compared to similar companies is that Workday took on great costs to restructure their products around ML, while other firms have simply incorporated AI features in addition to their current product offerings. Now, the benefits that they see as demand for AI solutions increases

will far outweigh any future costs, as the cost efficiency of using AI and ML will only increase from here on out. With the competition in software growing due to the growth of AI technology, Workday's early lead can help them maintain their footing while new competitors join the industry.



Workday also notes that they utilize Enterprise Content Management (ECM) while many still use ERP, putting them at an advantage as ERP can't keep up with the changing world. Through ERP, one combines traditional business applications and exchanges information amongst the applications. By having AI at their core, Workday is able to utilize ECM. By using a combination of ECM and AI, the system enables greater insight, creating a knowledgebase of enterprise experience, providing business knowledge for specific queries regarding the company. ECM has become more preferred as it allows for increased visibility and control over corporate information. As further AI development will place pressure on other cloud companies to convert to ECM, Workday is ahead of the competition with both AI and ECM establishment. Oracle and SAP, two primary industry leaders, have been struggling with these solution integrations. Oracle only has an ERP solution with software code written specifically for the cloud, allowing for some functionality to be missing. SAP is a step even further behind as they are wanting to utilize S/4HANA as opposed to ECM. S/4HANA does not provide a complete cloud solution, indicating further investments will be needed. While Oracle, SAP, and other competitors will need to invest to adapt to ECM, Workday has already become fully invested, and will benefit from downwards-sloping cost curves while their competitors see their expenses rise.

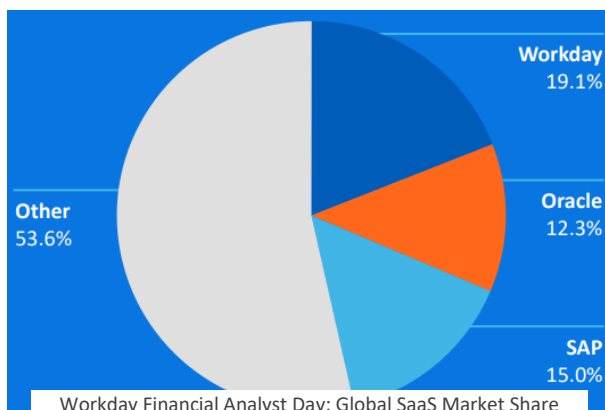
Prospective Clientele Within the Healthcare Sector

With Workday's Industry Accelerator program being introduced last September, Workday will be working towards helping complex industries, including healthcare, with streamlining and simplifying data. Within the healthcare sector, many healthcare organizations serve to benefit from enterprise software solutions as they face talent shortages, supply chain disruptions, and margin pressures. Workday's Industry Accelerator for healthcare helps optimize finance and talent resources, improve organizational agility, and manage supply chain operations. Recently,



Workday has been seeing continuous momentum in the healthcare industry; during their Q3 earnings, it was indicated that some of the strongest growth in average contract value was with healthcare providers, where they recently achieved \$500M in annual recurring revenue. Recently, Workday has added several new healthcare organizations such as Jefferson health, Northeast Georgia Health System, CHG Healthcare, and Whitman Hospital and Medical Clinics. Furthermore, each of these clients purchased a full suite of Workday applications in HCM, FINS, and supply chain management. As healthcare organizations usually deal with supply chain disruptions and high labor and materials costs, they tend to require higher enterprise software integration across all branches. Through 2028, Vantage Market Research has indicated an expected average CAGR of 6.8% per year in the healthcare enterprise software market. While this growth may appear meager, the average value of contracts that Workday creates with healthcare providers is greater, enabling greater revenue per client. Additionally, healthcare providers also face pressure to digitize their operations, so the acceleration of digital health encouraged healthcare companies to use enterprise software. This will allow Workday the opportunity to gain more clientele as well as become a primary HCM, FINS, and supply chain software provider within the industry.

Strong Customer Retention Enables Further Expansion



Workday works with over 50% of the Fortune 500 as well as over 23% of the Global 2000. With this, Workday experiences impressive customer retention rate as their gross retention is over 95%. With strong retention, it shows that not only are Workday's clients loyal, but that they are satisfied with Workday's products. Furthermore, as Workday serves a large number of these top companies, it shows their ability to compete against well-established competitors. This success can be attributed to Workday offering superior user experiences and functional capabilities compared to others. When speaking with clients who conducted competitive evaluations, Workday was found to finish first from a user experience and capability perspective almost always.



In terms of financials, having a high retention is a good sign for positive earnings and company growth. What this truly means for Workday, though, is that they have a stable flow of revenue to rely on, which allows them to focus their efforts on further penetrating their addressable market. While countries outside the United States represent over 50% of Workday's total addressable market, they only receive about 25% of their revenue internationally. The company has clearly recognized this and devoted efforts towards international expansion; during their Q4 earnings call, they announced that they had hired a new executive to oversee European operations, as well as new leaders to specifically conduct more business in the UK, Northern Europe, and German markets.

In addition to making leadership changes, Workday launched an accelerator program at the end of last year, aiming to further increase momentum internationally after finding the program successful in the United States. With this EMEA accelerator, Workday is looking to continue their rapid mass expansion scheme by targeting more industries, reaching more countries, and establishing more partners, with a steep target of \$10 billion in revenue come 2025. Heading into 2024, Carl Eschenbach stated that Workday is doubling down in strategic growth areas as they are looking to invest in their customer base and partner ecosystems while focusing on innovation and key industries. Part of this plan involves targeting more mid-size firms across the globe, allowing Workday to gain clientele outside of their monopoly of upper-echelon businesses. By targeting a wider demographic and utilizing accelerators that can help improve industry analytics, Workday will be able to reach more consumers. This plan will also help Workday leverage deeper country and industry expertise.

Risks to Projections and Expectations

Losing Client Retention Rates Due to Substitutes

Workday's threat of substitutes is considerably high, as they function in a highly competitive industry. If a new competitor were to emerge offering a newly innovative product, this could cause clients to switch. As Workday relies on the support of their returning customers, if their retention rates were to drop, this could not only cause them to lose revenue for the year but also fail to uphold their near-term revenue growth. As Workday is working towards putting themselves in an abundant financial position, their failure to uphold this growth could be detrimental.

Workday Will Have to Compete Against Oracle to Establish Themselves in Healthcare



Already being well established within both health insurance and healthcare, Oracle is a prominent provider of reliable healthcare solutions. In June of 2021, Oracle bought Cerner for \$27 billion in an effort to establish themselves further within healthcare technology. As of December 2022, Oracle generated \$1.5 billion in revenue through this. As Workday is hoping to engage themselves further into the healthcare industry, Oracle's strong presence could make it difficult.

Inability to Manage Substantial Growth

As Workday has been experiencing rapid growth, failing to manage this growth can result in Workday's inability to execute their business plan and maintain high level service. Although this growth is good, it has put a significant strain on Workday's administrative, operational, management, and financial infrastructure. If this growth is not properly managed, they will not be able to utilize their resources efficiently or scale their operations appropriately. By failing to keep up with their growth, they could lose their clientele, harming their retention rate, as well as face a substantial loss.

Although these pose risks to our projections, we are confident that Workday will overcome them. As Workday offers customizable plans, it sets their products slightly apart from their competitors. With this competitive edge, their stable financial history over the past few years, and strong customer loyalty, Workday will continue to see growth. Although Oracle poses a threat within the healthcare industry, they are nothing new to Workday. As the two have slightly varying models, they are each still able to obtain separate clients. Furthermore, as Workday is growing in the number of customers, employee headcount, and operations, these aspects will continue to expand in the future.

Portfolio Recommendation

Within our group’s current large-cap technological holdings, 40.6% consists of technology companies within the software industry. Salesforce, Inc. Is considered a software application, just as Workday, while Adobe and Microsoft involve software infrastructure. We believe holding both Workday and Salesforce could be beneficial for the portfolio, as it provides exposure to different areas of a rapidly growing cloud computing industry. However, considering the recent jump in Salesforce’s share price, we believe that it may be wise to shave down the position and capture some profits. Furthermore, considering that the portfolio is significantly overweight in Consumer Staples, to incorporate Workday into our portfolio, we believe candidates to be shaved include Home Depot, Domino’s Pizza, and/or Starbucks. Within the consumer goods sector, Home Depot is expected to have a year of decline due to the wary current macro environment. During their latest earnings call for 2023 Q1, Home Depot failed to miss their sales marks as well. Starbucks and Domino’s are also strong contenders to be shaved, as analysts question the sustainability of both companies’ growth over the long term. Starbucks revenue and earnings also fell short of Wall Street’s expectations due to a COVID surge in China harming their international sales. Ultimately, taking into consideration their growth opportunities, our current holdings in the technology sector, and Workday’s beta of 1.2, we are aiming for a position of around 2.5% within the portfolio.

Technology Sector Large-Cap Holdings

wanting to buy: WORKDAY		Software—Application
40.60%	SALESFORCE, INC	Software—Application
	ADOBE	Software—Infrastructure
	MICROSOFT	Software—Infrastructure
48.20%	DISNEY	Entertainment
	VERIZON	Telecom Services
	GOOGLE	Internet Content & Information
	FISERV, INC	Information Technology Services
11.20%	CISCO SYSTEMS	Communication Equipment
	INTEL CORP	Semiconductors
	KLA CORP	Semiconductor Equipment & Materials

Corporate Governance



After former CEO, Chano Fernandez, left Workday effectively immediately December 2022, Aneel Bhusri and Carl M. Eschenbach began serving as co-CEOs. When Fernandez stepped down from his role, no reason was given for his sudden departure. Workday is undergoing a CEO transition plan as Aneel Bhusri, the co-founder of Workday, is temporarily working alongside Eschenbach as co-CEO to show him the ropes. Workday is planning to phase out Bhusri by January 2024. Prior to founding Workday, Bhusri had experience with leadership positions at PeopleSoft as he was the vice chair of the board and senior VP for product development and strategy. Before Workday, Eschenbach was a general partner at Sequoia capital after spending 14 years at VMware. While at VMware, Eschenbach served various roles, such as president, COO, acting CFO, and executive VP of worldwide field operations. With both co-CEO’s on the board, Workday has a total of 12 board of directors. Aneel Bhusri is the board's chair while George Still, Jr., is the vice chair and lead independent director. Nine of the 12 board members are independent as Bhusri, Eschenbach, and Tom Bogan are dependent.

The board has also established four committees, an Audit Committee, a Compensation Committee, a Nominating & Conference Committee, and an Investment Committee. Executive members compensation is based on Workday’s 2022 annual proxy statement.



Executive Members

- Aneel Bhusri - Chairman, co-Founder, and co-CEO of Workday - \$18.4 mil
- Carl M. Eschenbach - co-CEO of Workday - \$363,148 (newly appointed)
- Tom Bogan - Former Workday Vice Chair of Corporate Development (Newly Retired) - \$7.4 mil
 - Bogan joined Workday in 2018 after Adaptive Insights, the company he was serving as CEO, was acquired by Workday

Independent Members

- George Still, Jr. - Partner at Emeritus at Northwest Venture Partners (NVP)
 - Still is Vice Chair and Lead Independent Director ; **skills:** finance & investing
- Ann-Marie Campbell – Home Depot Executive VP of US stores and international operations
 - Skills:** operational experience and strategic planning expertise
- Christa Davies – Aon CFO and Executive VP of global finance
 - Skills:** financial expertise and experience in software and technology industries
- Lynne Doughtie - Former US chairman and CEO of KPMG
 - Skills:** risk management and information security
- Wayne A.I. Frederick, M.D. - President of Howard university
 - Fellow of the American College of surgeons ; **skills:** deep experience in healthcare industry
- Mark Hawkins - Former President & CFO Emeritus of Salesforce.com, Inc.
 - Skills:** extensive board experience and knowledge on both tech and financial companies
- Mike McNamara - Former venture partner at Eclipse Ventures
 - Skills:** extensive leadership and experience managing international operations
- Lee J. Styslinger III - CEO of Altec, Inc
 - Skills:** Deep expertise as chairman and diverse leadership
- Jerry Yang - Lenovo Board Observer
 - Skills:** Experience building global technology products

Environmental, Social, and Governance (ESG) Observations

As of April 1, 2023, Workday's ISS Governance QualityScore is 9. The audit pillar received a 3, board received a 5, and both shareholder rights and compensation received 10's. Workday prides themselves on their community involvement, ability to be environmentally sustainable, strong company culture, and transparency to the public. Recently, Workday made it onto JUST Capital's 2023 JUST 100 list, identifying companies based on how they treat their employees and customers, environmental impact, and community support.

Environmental

- In 2021, Workday was able to mitigate the rest of their historical emissions, allowing them to officially achieve a lifetime net-zero carbon footprint. The prior year, they reached their goal of achieving net-zero carbon emissions.



- In an effort to maintain global warming at 1.5°C, Workday has committed to the use of science-based emissions reduction targets. Approved by the Science Based Targets initiative, these targets and collaborations with renewable energy providers will allow Workday to reduce emissions across the industry.

Social

- Workday helps deliver key insights to their clients to help them stay on track with their ESG initiatives and reporting. Through measurements, such as calculating a company's carbon footprint during the supply chain process, Workday is able to provide an overall ESG report. With the utilization of Workday's Adaptive Planning, these measurements have also allowed Workday to help their clients work towards achieving net zero emissions.
- Workday's Value Inclusion, Belonging, and Equity (VIBE) company commitment is to promote diversity and inclusion. With this commitment, Workday has pledged to increase the number of Latinx and Black employees in the United States by 30% by the year 2023. Recently, Workday has exceeded their overall target representation as they are currently at 103% of their original target. They are also committed to doubling leadership representation by 2023 and are 70% of the way to accomplish this goal.
- Workday is committed to using their resources in order to help empower underrepresented minorities through philanthropic engagement and investments. In an effort to help close the skills gap, employees contribute their time towards mentoring and volunteering within the community. Over this next year, Workday has committed to donating \$10 million towards social justice initiatives as well as contributing 250,000 hours towards volunteering and mentoring.
- Workday's Opportunity Onramps movement is a program that helps job seekers experiencing barriers become employed by Workday. These candidates can include veterans, untapped talent, and those skilled through alternative routes. By 2023, Workday has pledged to fill 20% of their early to mid-career roles by members who are part of the Opportunity Onramp. The ultimate incentive for this is for Workday to help do their part to close the worker opportunity gap.
- Workday places employees as their number one core value. Their Chief Diversity Officer and Chief People Officer develop and implement Workday's human capital (HC) strategy while regularly updating and seeking input from the Board of Directors and Compensation Committee on HC matters. Workday's current strategy is focused on belonging and diversity; employ development, engagement and wellbeing, and total rewards.

Governance

- Workday is an advocate for strong U.S. federal privacy legislation. They are constantly sparking the conversation that in order to establish trust, privacy must be prioritized. Workday often finds themselves writing to legislation in an effort to advance dialogue amongst policymakers and consumers to uncover the benefits that come with establishing client trust.
- Workday is actively advocating for government policies that will assist in the transition of a low-carbon economy.

Investment Summary

Our analysis leads us to conclude that Workday, Inc. is a fundamentally sound company. Workday's potential for growth is far greater than its peers in the software industry. *Workday* has created superior products and garnered loyalty from a large portion of their clients. Workday is beating their competitors, including Oracle and SAP, on the establishment of an AI platform and ECM. While competitors will need to invest in these systems and rework their software, Workday will not. With this and their newest Industry Accelerator program, Workday is able to offer their clients services their competitors quite can't. Working with over 50% of the Fortune 500 and over 23% of the Global 2000, Workday has been able to compete against larger competitors through their customer retention and superior product capabilities. As Workday is also expected to achieve GAAP profitability with the guidance of their new CEO, we believe Workday will see strong growth over the next five years.



Based on our findings, we arrived at an intrinsic value of **\$222.08** and a margin of safety of 16.2%. We are confident that this value accurately represents the fair value per share, **distinctly undervalued by the markets**. We expect Workday to continue to set themselves apart from their competitors with their advanced software program capabilities, drive into the healthcare industry, and ability to acquire and maintain top companies to do business while being significantly smaller than prime competitors. We, therefore, recommend a **strong buy** for Workday.

Disclosure: We have no positions in any stocks mentioned and no plans to initiate any positions within the next 72 hours.

We wrote this report ourselves, and it expresses our own opinions. We are not receiving compensation for it. We have no business relationship with any company whose stock is mentioned in this equity report. This report is written explicitly for the Oregon State Investment Group; however, we hold the right to distribute this document to potential employers or for other educational purposes as a sample of our work.

Signed:

Ashwin Nelson & Sarah Gruber

4/26/2023

References

<https://www.forbes.com/advisor/business/software/workday-review/#:~:text=Workday%20Pricing%20and%20Costs,%2499%20per%20user%2C%20per%20month>

<https://newsroom.workday.com/2023-02-27-Workday-Announces-Fiscal-2023-Fourth-Quarter-and-Full-Year-Financial-Results>

<https://www.comparably.com/companies/workday/reviews>

<https://upperedge.com/workday/david-vs-goliath-workdays-value-proposition-makes-the-difference/>

<https://www.fastcompany.com/90824249/these-are-the-best-ceos-for-2022-according-to-actual-employees>

<https://newsroom.workday.com/2022-09-12-Workday-Launches-New-Industry-Program-to-Accelerate-Customer-Cloud-Transformations-with-Expansive-Partner-Ecosystem>

<https://www.prnewswire.com/news-releases/workday-sees-continued-momentum-in-healthcare-helping-healthcare-organizations-drive-transformation-through-operational-insights-301798465.html>

<https://www.prnewswire.com/news-releases/workday-sees-continued-momentum-in-healthcare-helping-healthcare-organizations-drive-transformation-through-operational-insights-301798465.html>

<https://investor.workday.com/board-of-directors>

<https://erp.today/all-change-at-workday-as-ceo-bhusri-paves-way-for-successor/#:~:text=Chano%20Fernandez%20is%20leaving%20Workday,full%20control%20as%20sole%20CEO>

<https://softwareconnect.com/erp/top-vendors/>

<https://history-computer.com/the-10-largest-enterprise-software-companies-in-the-world-and-what-they-do/#:~:text=1..in%20nearly%20every%20industry%20imaginable>

[https://technologyadvice.com/blog/human-resources/workday-vs-peoplesoft/#:~:text=Customer%20relationship%20management%20\(CRM\)&text=Currently%2C%20Workday%20does%20not%20offer,via%20the%20Salesforce%20Service%20Cloud](https://technologyadvice.com/blog/human-resources/workday-vs-peoplesoft/#:~:text=Customer%20relationship%20management%20(CRM)&text=Currently%2C%20Workday%20does%20not%20offer,via%20the%20Salesforce%20Service%20Cloud)

<https://www.fiercehealthcare.com/health-tech/oracle-quarterly-revenue-jumps-18-fueled-strong-growth-cerner-business-unit>

<https://infomeddnews.com/software-development-trends-that-will-shape-2023/#:~:text=As%20we%20approach%202023%2C%20low,stay%20ahead%20of%20the%20curve.>

<https://www.prnewswire.com/news-releases/workday-announces-fiscal-2023-fourth-quarter-and-full-year-financial-results-301756889.html>

<https://www.macrotrends.net/stocks/charts/WDAY/workday/free-cash-flow>



<https://seekingalpha.com/symbol/WDAY/earnings>

<https://investor.workday.com/2020-02-27-Workday-Announces-Fourth-Quarter-and-Full-Year-Fiscal-2020-Financial-Results>

<https://investor.workday.com/2021-02-25-Workday-Announces-Fiscal-Fourth-Quarter-and-Full-Year-2021-Financial-Results>

<https://investor.workday.com/2022-02-28-Workday-Announces-Fiscal-2022-Fourth-Quarter-and-Full-Year-Financial-Results>

<https://simplywall.st/stocks/us/software/nasdaq-wday/workday/health>

<https://blog.workday.com/en-us/2011/workday-and-salesforce-com-partnership-what-it-means-for-our-customers.html>

<https://app.quotemedia.com/data/downloadFiling?webmasterId=101533&ref=115688742&type=PDF&symbol=WDAY&companyName=Workday+Inc.&formType=10-K&dateFiled=2021-03-02&CK=1327811>

<https://app.quotemedia.com/data/downloadFiling?webmasterId=101533&ref=117287473&type=PDF&symbol=WDAY&companyName=Workday+Inc.&formType=10-K&dateFiled=2023-02-27&CK=1327811>

<https://app.quotemedia.com/data/downloadFiling?webmasterId=101533&ref=117287473&type=PDF&symbol=WDAY&companyName=Workday+Inc.&formType=10-K&dateFiled=2023-02-27&CK=1327811>

<https://finbox.com/NASDAQGS:WDAY/models/dcf-revenue-exit-5yr/>

<https://www.gurufocus.com/term/InterestExpense/WDAY/Interest-Expense/Workday>

https://pages.stern.nyu.edu/~adamodar/New_Home_Page/valquestions/noncashwc.htm

https://ycharts.com/indicators/us_corporate_bbb_effective_yield#:~:text=US%20Corporate%20BBB%20Effective%20Yield%20is%20at%205.57%25%2C%20compared%20to,long%20term%20average%20of%205.24%25.

<https://www.fool.com/investing/2016/06/23/how-big-of-a-risk-is-share-based-compensation-at-w.aspx>

<https://brandminds.com/porters-five-forces-analysis-of-the-it-industry/>

<https://www.accountingtools.com/articles/the-asset-to-equity-ratio.html>

<https://www.investopedia.com/terms/u/unearnedrevenue.asp>

<https://www.trustradius.com/products/workday-hcm/competitors>

<https://www.appsruntheworld.com/top-10-hcm-software-vendors-and-market-forecast/>

<https://finance.yahoo.com/news/insiders-workday-inc-nasdaq-wday-110043883.html>

<https://erp.today/more-countries-industries-and-partners-in-mass-workday-emea-expansion/#:~:text=Workday%20will%20be%20adding%20more,%2410bn%20revenue%20by%202025>

<https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/the-next-software-disruption-how-vendors-must-adapt-to-a-new-era>

<https://seekingalpha.com/article/4574041-workday-cloud-saas-stock-potential-future-blue-chip-buy>

<https://seekingalpha.com/article/4591465-workday-stock-gaap-profitability-likely-this-year>

<https://www.morningstar.com/articles/1000037/workdays-moat-widens>

<https://www.morningstar.com/stocks/xnas/wday/analysis>

<https://www.selecthub.com/hr-management-software/paycor-vs-workday-hcm/>

https://filecache.investorroom.com/mr5ir_workday/104/workday-2021-financial-analyst-day.pdf

<https://www.workday.com/content/dam/web/en-us/documents/other/workday-2022-financial-analyst-dayv2.pdf>

<https://www.globenewswire.com/en/news-release/2023/03/14/2626610/0/en/Healthcare-ERP-Market-Size-Share-to-Surpass-USD-9-16-Billion-by-2028-Vantage-Market-Research.html>

<https://erp.today/more-countries-industries-and-partners-in-mass-workday-emea-expansion/>

<https://simplywall.st/stocks/us/software/nasdaq-wday/workday/management>



<https://seekingalpha.com/article/4586114-workday-inc-wday-presents-morgan-stanley-technology-media-and-telecom-conference-transcript>

<https://thestrategystory.com/2023/01/31/what-does-workday-do-how-does-it-work-business-model-competitors/>

<https://www.forbes.com/advisor/business/software/workday-review/>

<https://www.fool.com/investing/2022/11/30/why-workday-stock-was-climbing-today/>

<https://www.workday.com/content/dam/web/se/documents/datasheets/datasheet-about-workday-se.pdf>

<https://csimarket.com/stocks/segments.php?code=WDAY>

<https://aimultiple.com/products/workday-hcm#:~:text=Average%20Company%20Size,up%200%25%20of%20total%20customers.>

<https://newsroom.workday.com/2023-01-16-Workday-Sees-Continued-Momentum-Across-Retail-Industry,-Empowering-Global-Organizations-to-Adapt-to-Evolving-Business,-Employee,-and-Consumer-Needs>

<https://www.sociale.com/how-does-workday-make-money/>

<https://www.forbes.com/sites/greatspeculations/2022/01/18/workday-stock-is-a-good-pick-to-realize-gains/?sh=75d55ad3112f>

<https://joshbersin.com/2023/03/workdays-response-to-ai-and-machine-learning-moving-faster-than-ever/>

<https://upperedge.com/workday/david-vs-goliath-workdays-value-proposition-makes-the-difference/>

<https://www.grandviewresearch.com/industry-analysis/cloud-computing-industry>

<https://www.globenewswire.com/news-release/2022/10/11/2531591/0/en/Cloud-Computing-Market-Size-USD-1738-44-Billion-at-a-CAGR-of-18-53-CAGR-by-2030-Report-by-Market-Research-Future-MRFR.html>

<https://www.gartner.com/en/newsroom/press-releases/2022-10-31-gartner-forecasts-worldwide-public-cloud-end-user-spending-to-reach-nearly-600-billion-in-2023>

<https://www.globenewswire.com/en/news-release/2023/03/14/2626610/0/en/Healthcare-ERP-Market-Size-Share-to-Surpass-USD-9-16-Billion-by-2028-Vantage-Market-Research.html#:~:text=Market%20size%20and%20growth%3A%20The,6.4%25%20from%202022%20to%202028.>

https://www.peerspot.com/products/comparisons/sap-hcm_vs_workday

<https://www.appsruntheworld.com/top-10-hcm-software-vendors-and-market-forecast/>

<https://markets.businessinsider.com/news/stocks/workday-layoffs-2023-what-to-know-about-the-latest-wday-job-cuts-1032054848#:~:text=According%20to%20a%20statement%20from,been%20kind%20to%20tech%20companies.>



Appendix

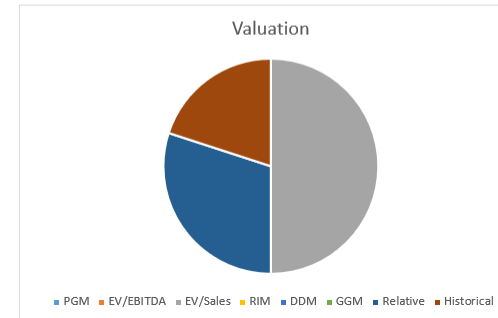
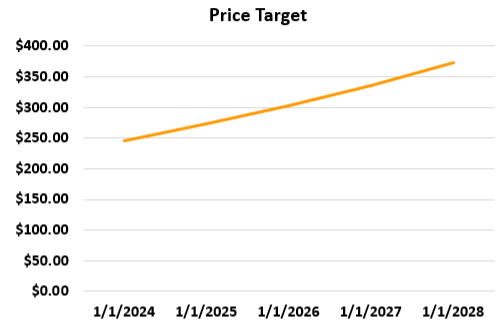
Valuation Weightings

WDAY
Workday, Inc.
Valuation

Valuation Method	Value	MoS	Weight	Current Price	Intrinsic Value	Price Target
PGM	112.34	(41.2)%	0.0 %	161.05	222.44	4/28/2024 246.28
EV/EBITDA	143.89	(24.7)%	0.0 %	171.05	222.76	4/28/2025 273.12
EV/Sales	233.02	22.0 %	50.0 %	181.05	222.95	4/28/2026 302.89
RIM	22.88	(88.0)%	0.0 %	191.05	222.95	4/28/2027 335.89
DDM	-	(100.0)%	0.0 %	201.05	222.76	4/28/2028 372.50
GGM	-	(100.0)%	0.0 %	211.05	222.44	
Relative	175.33	(8.2)%	30.0 %	221.05	222.08	
Historical	264.87	38.6 %	20.0 %			
Intrinsic Value Per Share	222.08	16.2 %	100.0 %			
Market Price	191.05					
Cost of Capital	10.50 %					

Recommendation	
Portfolio	Large-Cap
Date of Pitch	4/28/2023
Analyst	Sarah Gruber & Ashwin Nelson
Coverage Type	Initiation
Buy/Hold/Sell	Buy
Update Frequency	
Next Earnings Date (Q?)	Q2 May 2023

Summary
 With a price target of \$222.08 per share, I am recommending a Buy



Forecasts and DCF

WDAY Workday, Inc. Forecasts																
# of Years Discounted																
Period Ending:	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	Underlying Assumptions					
						1.00	2.00	3.00	4.00	5.00	Growth					
											Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	
Costs of Professional Services	455,073	530,817	529,544	592,485	648,612	721,900	730,949	764,408	819,467	872,818	10.00 %	8.75 %	8.00 %	7.50 %	7.00 %	
Total Cost of Sales	834,950	1,019,330	1,141,456	1,388,339	1,660,059	1,876,939	2,100,956	2,321,889	2,567,664	2,805,486	26.0 %	25.2 %	24.3 %	23.5 %	22.5 %	
Gross Profit	1,987,230	2,607,876	3,176,540	3,750,459	4,555,759	5,342,057	6,252,746	7,233,209	8,358,564	9,663,340	74.0 %	74.9 %	75.7 %	76.5 %	77.5 %	
Product development	1,211,832	1,549,906	1,721,222	1,979,220	2,270,660	2,671,039	3,007,333	3,392,060	3,714,917	4,177,057	37.00 %	36.00 %	35.00 %	34.00 %	33.50 %	
Sales and marketing	891,345	1,146,548	1,233,173	1,461,921	1,848,093	2,165,699	2,380,805	2,694,538	3,032,028	3,366,583	30.00 %	28.50 %	28.20 %	27.75 %	27.00 %	
General and administrative	347,337	367,724	414,068	486,012	604,087	685,805	760,187	859,959	956,045	1,028,678	9.50 %	9.10 %	9.00 %	8.75 %	8.25 %	
Total costs and expenses	3,285,464	4,129,436	4,566,595	5,255,248	6,438,018	7,399,471	8,249,280	9,268,445	10,270,654	11,377,803	102.5 %	98.8 %	97.0 %	94.0 %	91.3 %	
EBIT	(483,284)	(502,230)	(248,599)	(116,450)	(222,200)	(180,475)	104,421	286,653	655,574	1,091,022						
Interest Revenue	42,461	41,268	18,788	5,575	97,709	72,190	25,061	33,443	43,705	49,875	1.00 %	0.30 %	0.35 %	0.40 %	0.40 %	
Interest Expense	60,209	58,685	68,806	16,602	102,353	108,285	110,269	114,661	123,466	130,923	1.50 %	1.32 %	1.20 %	1.13 %	1.05 %	
Net interest income	(17,748)	(17,417)	(50,018)	(11,027)	(4,644)	(36,095)	(85,208)	(81,218)	(79,761)	(81,047)						
Other income	57,280	37,200	23,483	143,659	(33,106)	10,838	50,122	70,708	52,779	24,938						
Net interest and other income	39,532	19,783	(26,535)	132,632	(37,750)	(25,266)	(35,086)	(10,511)	(46,983)	(56,110)	0.15 %	0.60 %	0.74 %	0.30 %	0.20 %	
EBT	(423,752)	(482,447)	(275,134)	16,182	(259,950)	(205,741)	69,336	276,142	608,591	1,034,913						
Effective tax rate	1.3 %	0.4 %	(2.7)%	(81.5)%	(41.1)%	(22.00)%	22.00 %	22.00 %	22.00 %	22.00 %						
Provision for (benefit from) income taxes	(5,494)	(1,773)	7,297	(13,191)	106,799	45,263	15,354	60,751	133,890	227,681						
Net income (loss)	(418,258)	(480,674)	(282,431)	29,373	(366,749)	(251,005)	54,082	215,391	474,701	807,232						
Net income (loss) per share, basic (in dollars per share)	(1.93)	(2.12)	(1.19)	0.12	(1.44)	(0.95)	0.20	0.76	1.61	2.65						
Net income (loss) per share, diluted (in dollars per share)	(1.93)	(2.12)	(1.19)	0.12	(1.44)	(0.95)	0.20	0.76	1.61	2.65						
Weighted-average shares used to compute net income (loss) per share, basic (in sh)	216,789	227,185	237,019	247,249	254,819	265,012	275,612	285,259	295,243	304,100	4.00 %	4.00 %	3.50 %	3.50 %	3.00 %	
Weighted-average shares used to compute net income (loss) per share, diluted (in sh)	216,789	227,185	237,019	254,032	254,819	265,012	275,612	285,259	295,243	304,100	4.00 %	4.00 %	3.50 %	3.50 %	3.00 %	
Balance Sheet:																
Cash and cash equivalents	638,554	731,141	1,384,181	1,534,273	1,886,311	1,975,117	2,312,722	2,627,652	3,064,807	3,501,246	% of Current Total Assets	24.00 %	24.50 %	25.00 %	25.50 %	26.00 %
Marketable securities	1,139,864	1,213,432	2,151,472	2,109,888	4,235,083	3,769,182	4,228,978	4,624,667	5,380,445	6,463,839	% of Current Total Assets	43.80 %	44.80 %	44.80 %	44.80 %	43.80 %
Total current assets	2,700,596	3,094,622	4,802,061	5,214,065	8,108,224	8,229,656	9,439,683	10,510,608	12,445,252	13,466,311	% of Revenue	114.00 %	113.00 %	110.00 %	110.00 %	108.00 %
Debt, current	232,514	244,000	244,000	1,222,443	-	825,853	998,059	1,190,565	1,491,430	1,778,055	% of Total Liabilities	13.00 %	13.50 %	14.00 %	15.00 %	15.50 %
Total current liabilities	2,430,691	2,969,000	3,333,000	5,067,855	4,628,116	6,352,717	7,393,026	8,504,037	9,942,867	11,471,319	% of Revenue	88.00 %	88.50 %	89.00 %	91.00 %	92.00 %
Statement of Cashflows:																
Depreciation and amortization	198,111	276,278	293,657	343,723	364,357	425,921	538,814	640,192	732,057	835,411	% of Revenue	5.90 %	6.45 %	6.70 %	6.70 %	6.70 %
Capital expenditures, excluding owned real estate projects	(202,507)	(243,694)	(259,380)	(264,267)	(359,552)	(324,855)	(334,148)	(382,204)	(409,734)	(436,409)		(4.50)%	(4.00)%	(4.00)%	(3.75)%	(3.50)%
DCF																
FCFF:																
Sales	2,822,180	3,627,206	4,317,996	5,138,798	6,215,818	7,218,997	8,353,703	9,555,088	10,926,238	12,468,835						
EBIT	(463,284)	(502,230)	(248,599)	(116,450)	(222,200)	(180,475)	104,421	286,653	655,574	1,091,022						
EBITDA	(265,173)	(225,952)	45,058	227,273	142,157	245,446	643,235	926,844	1,387,631	1,926,434						
Non-Cash Working Capital	(1,275,999)	(1,575,036)	(1,913,139)	(2,275,508)	(2,844,336)	(3,041,508)	(3,496,985)	(4,055,184)	(4,881,839)	(6,192,015)						
Non-Cash Working Capital	(256,166)	74,931	376,568	494,716	416,695	605,913	1,075,740	1,421,979	2,070,060	2,986,585						
Capital Expenditures	(202,507)	(243,694)	(259,380)	(264,267)	(359,552)	(324,855)	(334,148)	(382,204)	(409,734)	(436,409)						
Unlevered Free Cash Flow (FCFF)	(461,673)	(168,763)	123,188	230,449	57,143	281,058	741,592	1,039,776	1,660,326	2,560,180						
W of FCFF																
Growth Rate																
Capital Structure																
MV of Equity	98.9 %	48,683,170														
Preferred Shares	0.0 %	-														
BV of Debt	6.1 %	3,157,733														
Operating Leases	0.4 %	181,799														
Long-term debt	5.7 %	2,975,934														
WACC Assumptions																
Beta	1.20															
Equity Risk Premium	5.5 %															
Risk Free Rate for Local Currency	3.8 %															
WACC Assumptions																
Cost of Equity	10.9 %															
Cost of Preferred Shares	0.0 %															
Cost of Debt	5.5 %															
Credit Rating	BBB															
Default Spread	1.7 %															
LT Credit Yield	5.5 %															
Cost of Capital	10.5 %															
Valuation																
2 of PV of Future Cash Flows	4,300,730															
Terminal Tax Rate	22.0 %															
Terminal Growth Rate	3.0 %															
Exit Multiple	n/a															
PV of Terminal Value	21,360,868															
Enterprise Value	25,661,598															
+ CBCE	1,886,311															
+ Investments & Other	4,235,083															
- Debt	(3,157,733)															
- Minority Interests	-															
- Preferred Shares	-															
Equity Value	28,625,259															
Shares Outstanding (Diluted)	254,819															
Intrinsic Value Per Share	112.34															

Chart Area



Segment Growth Rates

# of Years Discounted	1.00	2.00	3.00	4.00	5.00					
Period Ending:	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E
Segments Growth Rates										
Revenue	2,822,180	3,627,206	4,317,996	5,138,798	6,215,818	7,218,997	8,353,702	9,555,098	10,926,228	12,468,825
Revenue by Service Category:										
Subscription Services	2,385,769	3,096,389	3,788,452	4,546,313	5,567,206	6,513,631	7,588,380	8,726,637	10,035,633	11,515,889
Professional Services	436,411	530,817	529,544	592,485	648,612	705,366	765,322	828,461	890,595	952,937

Growth	Underlying Assumptions				
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Revenue Growth	16.14 %	15.72 %	14.38 %	14.35 %	14.12 %
Revenue Growth	17.00 %	16.50 %	15.00 %	15.00 %	14.75 %
	8.75 %	8.50 %	8.25 %	7.50 %	7.00 %

Beta

Period	Years	Beta	Correlation	RSQ	Observations
Monthly	1	0.87	56.5 %		12
Monthly	2	1.06	61.2 %	37.5 %	24
Monthly	3	1.31	69.0 %	47.6 %	36
Monthly	4	1.27	66.9 %	44.8 %	48
Monthly	5	1.25	62.8 %	39.4 %	60
Weekly	1	1.35	67.2 %	45.1 %	52
Weekly	2	1.29	62.7 %	39.3 %	104
Weekly	3	1.30	63.9 %	40.9 %	156
Weekly	4	1.22	60.4 %	36.5 %	208
Weekly	5	1.28	61.3 %	37.6 %	260
Daily	1	1.45	70.7 %	50.0 %	252
Daily	2	1.41	67.6 %	45.7 %	504
Daily	3	1.38	64.7 %	41.8 %	756
Daily	4	1.20	63.1 %	39.9 %	1,008
Daily	5	1.24	62.7 %	39.3 %	1,260

Bottom-Up Beta

WDAY Metrics		Competitor Metrics			
		Ticker	Beta	Debt/Equity	Weight
Debt/Equity	53.3 %	CRM	1.24	25.1 %	30.0 %
Tax Rate	22.0 %	ADP	0.82	114.4 %	30.0 %
Current Price	191.05	ADSK	1.53	232.8 %	0.0 %
Risk Free Rate	3.8 %	SAP	1	28.4 %	0.0 %
Risk Premium	5.9 %	SNOW	0.75	4.6 %	0.0 %
Relative Beta		ORCL	1	N/A	30.0 %
Unlevered Beta	0.80	PAYC	1.41	5.9 %	10.0 %
Re-levered Beta	1.13		0	0.0 %	0.0 %
			0	0.0 %	0.0 %
		Average	1.06	42.4 %	100.0 %



Dupont Analysis

DuPont Analysis					
Period Ending	2019A	2020A	2021A	2022A	2023A
NOPAT Margin	(16.2)%	(13.8)%	(5.9)%	(4.1)%	(5.0)%
Asset Turnover		0.59 x	0.56 x	0.53 x	0.52 x
Return on Assets	0.0 %	(8.1%)	(3.3%)	(2.2%)	(2.6%)
Debt Burden	0.91 x	0.96 x	1.11 x	(0.14)x	1.17 x
NOPAT Margin	(16.2)%	(13.8)%	(5.9)%	(4.1)%	(5.0)%
Asset Turnover	0.0 x	0.6 x	0.6 x	0.5 x	0.5 x
Leverage Ratio		2.48 x	2.37 x	2.12 x	2.15 x
Return on Equity	0.0 %	(19.3%)	(8.6%)	0.6 %	(6.6%)
NOPAT	(457,277)	(500,384)	(255,192)	(211,376)	(313,490)
Average Total Capitalization	1,465,353	1,752,259	1,984,874	2,576,218	4,280,751
Return on Capital	(31.2%)	(28.6%)	(12.9%)	(8.2%)	(7.3%)

Profitability Ratios					
Period Ending	2019A	2020A	2021A	2022A	2023A
Gross Margin	70.4 %	71.9 %	73.6 %	73.0 %	73.3 %
Operating Margin	(16.4)%	(13.8)%	(5.8)%	(2.3)%	(3.6)%
Profit Margin	(14.8)%	(13.3)%	(6.5)%	0.6 %	(5.9)%
Operating Costs to Sales	116.4 %	113.8 %	105.8 %	102.3 %	103.6 %
Effective Tax Rate	1.3 %	0.4 %	(2.7)%	(81.5)%	(41.1)%

Leverage Ratios					
Period Ending	2019A	2020A	2021A	2022A	2023A
Debt to Total Assets	0.65 x	0.64 x	0.62 x	0.57 x	0.59 x
Total Debt to Equity	0.62 x	0.51 x	0.55 x	0.41 x	0.53 x
LT Debt to Equity	0.50 x	0.41 x	0.21 x	0.14 x	0.53 x
Times Interest Earned (TIE)	7.7 x	8.6 x	3.6 x	7.0 x	2.2 x
Degree of Operating Leverage		0.52 x	(2.17)x	(5.81)x	(64.35)x

Liquidity Ratios					
Period Ending	2019A	2020A	2021A	2022A	2023A
Current Ratio	1.11 x	1.04 x	1.12 x	1.03 x	1.75 x
Acid Test/Quick Ratio	1.11 x	1.04 x	1.12 x	1.03 x	1.75 x
Net Working Capital to Sales	0.10 x	0.03 x	0.12 x	0.03 x	0.56 x
Payout Ratio	-	-	-	-	-
Plowback/Retention Ratio	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Sustainable Growth Rate	0.0 %	(19.3)%	(8.6)%	0.6 %	(6.6)%
EVA	(611,067)	(500,384)	(255,192)	(211,376)	(313,490)
Accounts Receivable Turnover		4.58 x	4.52 x	4.52 x	4.42 x
Average Daily Sales	7732.0 x	9937.6 x	11830.1 x	14078.9 x	17029.6 x
Days' Sales Outstanding (DSO)		79.6 x	80.7 x	80.8 x	82.6 x



Income Statement

Statement of Operations (in thousands of \$'s)

Period Ending:	2019A	2020A	2021A	2022A	2023A
Subscription Services	\$ 2,385,769	\$ 3,096,389	\$ 3,788,452	\$ 4,546,313	\$ 5,567,206
Professional Services	436,411	530,817	529,544	592,485	648,612
Total revenues	2,822,180	3,627,206	4,317,996	5,138,798	6,215,818
Costs and expenses:					
Cost of Subscription Services	379,877	488,513	611,912	795,854	1,011,447
Costs of Professional Services	\$ 455,073	530,817	529,544	592,485	648,612
Product development	1,211,832	1,549,906	1,721,222	1,879,220	2,270,660
Sales and marketing	891,345	1,146,548	1,233,173	1,461,921	1,848,093
General and administrative	347,337	367,724	414,068	486,012	604,087
Total costs and expenses	3,285,464	4,129,436	4,566,595	5,255,248	6,438,018
Operating income (loss)	(463,284)	(502,230)	(248,599)	(116,450)	(222,200)
Other income (expense), net	39,532	19,783	(26,535)	132,632	(37,750)
Income (loss) before provision for (benefit from) income taxes	(423,752)	(482,447)	(275,134)	16,182	(259,950)
Provision for (benefit from) income taxes	(5,494)	(1,773)	7,297	(13,191)	106,799
Net income (loss)	\$ (418,258)	\$ (480,674)	\$ (282,431)	\$ 29,373	\$ (366,749)
Net income (loss) per share, basic (in dollars per share)	\$ (1.93)	\$ (2.12)	\$ (1.19)	\$ 0.12	\$ (1.44)
Net income (loss) per share, diluted (in dollars per share)	\$ (1.93)	\$ (2.12)	\$ (1.19)	\$ 0.12	\$ (1.44)
Weighted-average shares used to compute net income (loss) per share, basic (in shares)	216,789	227,185	237,019	247,249	254,819
Weighted-average shares used to compute net income (loss) per share, diluted (in shares)	216,789	227,185	237,019	254,032	254,819

Balance Sheet

Current assets:					
Cash and cash equivalents	\$ 638,554	\$ 731,141	\$ 1,384,181	\$ 1,534,273	\$ 1,886,311
Marketable securities	1,139,864	1,213,432	2,151,472	2,109,888	4,235,083
Trade and other receivables, net of allowance for credit losses of \$8,509 and \$10,790, respectively	704,680	877,578	1,032,484	1,242,545	1,570,086
Deferred costs	80,809	100,459	122,764	152,957	191,054
Prepaid expenses and other current assets	136,689	172,012	111,160	174,402	225,690
Total current assets	2,700,596	3,094,622	4,802,061	5,214,065	8,108,224
Property and equipment, net	796,907	936,179	972,403	1,123,075	1,201,254
Operating lease right-of-use assets		290,902	414,143	247,808	249,278
Deferred costs, noncurrent	183,518	222,395	271,796	341,259	420,988
Acquisition-related intangible assets, net	313,240	308,401	248,626	391,002	305,465
Goodwill	1,379,125	1,819,261	1,819,625	2,840,044	2,840,044
Other assets	147,360	144,605	189,757	341,252	360,985
Total assets	5,520,746	6,816,365	8,718,411	10,498,505	13,486,238
Current liabilities:					
Accounts payable	29,093	57,556	75,596	55,487	153,751
Accrued expenses and other current liabilities	123,542	130,050	169,266	195,590	260,131
Accrued compensation	207,924	248,154	285,061	402,885	563,548
Unearned revenue	1,837,618	2,223,178	2,556,624	3,110,947	3,559,393
Operating lease liabilities		66,147	93,000	80,503	91,343
Debt, current	232,514	244,319	1,103,101	1,222,443	0
Total current liabilities	2,430,691	2,969,404	4,282,648	5,067,855	4,628,166
Debt, noncurrent	972,264	1,017,967	691,913	617,354	2,975,934
Unearned revenue, noncurrent	111,652	86,025	80,111	71,533	74,540
Operating lease liabilities, noncurrent		241,425	350,051	182,456	181,799
Other liabilities	47,697	14,993	35,854	24,225	40,231
Total liabilities	3,562,304	4,329,814	5,440,577	5,963,423	7,900,670
Commitments and contingencies (Note 13)					
Stockholders' equity:					
Preferred stock, \$0.001 par value; 10 million shares authorized; no shares issued or outstanding as of	0	0	0	0	0
Additional paid-in capital	4,105,334	5,090,187	6,254,936	7,284,174	8,828,639
Treasury stock, at cost; 1 million and 0.1 million shares as of January 31, 2023, and 2022, respectively	0	0	(12,384)	(12,467)	(185,047)
Accumulated other comprehensive income (loss)	(809)	23,492	(54,970)	7,709	53,051
Accumulated deficit	(2,146,304)	(2,627,359)	(2,909,990)	(2,744,585)	(3,111,334)
Total stockholders' equity	1,958,442	2,486,551	3,277,834	4,535,082	5,585,568
Total liabilities and stockholders' equity	5,520,746	6,816,365	8,718,411	10,498,505	13,486,238
Class A Common stock, value	157	170	184	196	204
Class B Common stock, value	\$ 64	\$ 61	\$ 58	\$ 55	\$ 55



Statement of Cash Flows

Cash flows from operating activities:

Net income (loss)	\$ (418,258)	\$ (480,674)	\$ (282,431)	\$ 29,373	\$ (366,749)
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Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:

Depreciation and amortization	198,111	276,278	293,657	343,723	364,357
Share-based compensation expenses	652,465	859,571	1,004,854	1,100,584	1,294,622
Amortization of deferred costs	71,238	90,641	112,647	138,797	174,611
Amortization and writeoff of debt discount and issuance costs	59,974	54,034	53,693	3,988	6,955
Non-cash lease expense	0	67,325	84,376	86,235	91,750
(Gains) losses on investments	0	0	(16,558)	(145,845)	30,780
Other	(53,195)	(35,063)	4,247	(14,213)	12,645

Changes in operating assets and liabilities, net of business combinations:

Trade and other receivables, net	(160,527)	(176,141)	(159,240)	(207,933)	(318,600)
Deferred costs	(131,996)	(149,168)	(184,353)	(238,453)	(292,437)
Prepaid expenses and other assets	(16,344)	(17,736)	52,117	(35,153)	(14,070)
Accounts payable	5,877	20,293	(3,476)	9,414	85,773
Accrued expenses and other liabilities	54,895	220	(18,472)	50,671	135,965
Unearned revenue	344,418	355,018	327,380	529,516	451,593
Net cash provided by (used in) operating activities	606,658	864,598	1,268,441	1,650,704	1,657,195

Cash flows from investing activities:

Purchases of marketable securities	(1,989,868)	(1,797,468)	(2,731,885)	(2,858,729)	(7,182,961)
Maturities of marketable securities	2,090,693	1,686,643	1,802,334	2,804,103	4,948,833
Sales of marketable securities	949,970	56,508	10,627	199,016	104,324
Owned real estate projects	(181,180)	(99,308)	(6,116)	(171,501)	(4,236)
Capital expenditures, excluding owned real estate projects	(202,507)	(243,694)	(253,380)	(264,267)	(359,552)
Business combinations, net of cash acquired	(1,474,337)	(473,603)	0	(1,190,199)	0
Purchase of other intangible assets	(10,450)	(850)	(2,950)	(8,007)	(700)
Purchases of non-marketable equity and other investments	(43,016)	(25,393)	(67,482)	(123,011)	(23,173)
Sales and maturities of non-marketable equity and other investments	17,911	252	7,228	5,169	11,539
Other	0	(9)			
Net cash provided by (used in) investing activities	(842,784)	(896,922)	(1,241,624)	(1,607,426)	(2,505,926)

Cash flows from financing activities:

Proceeds from issuance of debt, net of debt discount	0	0	747,795	0	2,978,077
Repayments and extinguishment of debt	350,030	(30)	(268,762)	(37,614)	(1,843,605)
Payments for debt issuance costs	0	0	0	0	(7,220)
Repurchases of common stock	0	0	0	0	(74,666)
Proceeds from issuance of common stock from employee equity plans, net of taxes paid for shares withheld	93,567	125,673	148,673	148,328	151,974
Other	(248)	(519)	(2,657)	(463)	(739)
Net cash provided by (used in) financing activities	(256,711)	125,124	625,049	110,251	1,203,821
Effect of exchange rate changes	(614)	(282)	1,334	(705)	(595)
Net increase (decrease) in cash, cash equivalents, and restricted cash	(493,451)	92,518	653,200	152,824	354,495
Cash, cash equivalents, and restricted cash at the beginning of period	1,135,654	642,203	734,721	1,387,921	1,540,745
Cash, cash equivalents, and restricted cash at the end of period	642,203	734,721	1,387,921	1,540,745	1,895,240

Supplemental cash flow data

Cash paid for interest	38	3,306	14,373	13,310	59,510
Cash paid for income taxes, net of refunds	6,007	9,010	9,939	12,563	88,569

Non-cash investing and financing activities:

Purchases of property and equipment, accrued but not paid	56,308	46,027	54,792	47,015	51,089
Cash and cash equivalents	\$ 642,203	\$ 642,203	1,384,181	1,534,273	1,886,311
Total cash, cash equivalents, and restricted cash	\$ 642,203	\$ 642,203	1,387,921	1,540,745	1,895,240
Restricted cash	0	0	3,602	6,472	8,929
Restricted cash	0	0	\$ 138	\$ 0	\$ 0



Historical Growth Rates

Period Ending:	2019A	2020A	2021A	2022A	2023A	3-Year Calculations		
						Mean	Median	Slope
Income Statement:								
Subscription Services	2,385,769	3,096,389	3,788,452	4,546,313	5,567,206			
% Revenue	84.5 %	85.4 %	87.7 %	88.5 %	89.6 %	88.6 %	88.5 %	0.01
YOY		29.8 %	22.4 %	20.0 %	22.5 %	21.6 %	22.4 %	0.00
CAGR		29.8 %	26.0 %	24.0 %	23.6 %			
Professional Services	436,411	530,817	529,544	592,485	648,612			
% Revenue	15.5 %	14.6 %	12.3 %	11.5 %	10.4 %	11.4 %	11.5 %	(0.01)
YOY		21.6 %	(0.2)%	11.9 %	9.5 %	7.0 %	9.5 %	0.05
CAGR		21.6 %	10.2 %	10.7 %	10.4 %			
Total revenues	2,822,180	3,627,206	4,317,996	5,138,798	6,215,818			
YOY		28.5 %	19.0 %	19.0 %	21.0 %	19.7 %	19.0 %	948,911.00
CAGR		28.5 %	23.7 %	22.1 %	21.8 %			
Total costs and expenses	3,285,464	4,129,436	4,566,595	5,255,248	6,438,018			
% Revenue	116.4 %	113.8 %	105.8 %	102.3 %	103.6 %	103.9 %	103.6 %	(0.01)
YOY		25.7 %	10.6 %	15.1 %	22.5 %	16.1 %	15.1 %	0.06
CAGR		25.7 %	17.9 %	16.9 %	18.3 %			
EBT	(423,752)	(482,447)	(275,134)	16,182	(259,950)			
% Revenue	(15.0)%	(13.3)%	(6.4)%	0.3 %	(4.2)%	(3.4)%	(4.2)%	0.01
% EBT	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	-
YOY		Negative	Negative	Negative	Negative	#DIV/0!	#NUM!	#DIV/0!
CAGR		13.9 %	(19.4)%	Negative	(11.5)%			
Cost of Subscription Services	379,877	488,513	611,912	795,854	1,011,447			
% Revenue	13.5 %	13.5 %	14.2 %	15.5 %	16.3 %	15.3 %	15.5 %	0.01
% EBT	(89.6)%	(101.3)%	(222.4)%	4918.1 %	(389.1)%	1435.5 %	(222.4)%	(0.83)
YOY		28.6 %	25.3 %	30.1 %	27.1 %	27.5 %	27.1 %	0.01
CAGR		28.6 %	26.9 %	28.0 %	27.7 %			
Costs of Professional Services	455,073	530,817	529,544	592,485	648,612			
% Revenue	16.1 %	14.6 %	12.3 %	11.5 %	10.4 %	11.4 %	11.5 %	(0.01)
% EBT	(107.4)%	(110.0)%	(192.5)%	3661.4 %	(249.5)%	1073.1 %	(192.5)%	(0.29)
YOY		16.6 %	(0.2)%	11.9 %	9.5 %	7.0 %	9.5 %	0.05
CAGR		16.6 %	7.9 %	9.2 %	9.3 %			
Product development	1,211,832	1,549,906	1,721,222	1,879,220	2,270,660			
% Revenue	42.9 %	42.7 %	39.9 %	36.6 %	36.5 %	37.7 %	36.6 %	(0.02)
% EBT	(286.0)%	(321.3)%	(625.6)%	11613.0 %	(873.5)%	3371.3 %	(625.6)%	(1.24)
YOY		27.9 %	11.1 %	9.2 %	20.8 %	13.7 %	11.1 %	0.05
CAGR		27.9 %	19.2 %	15.7 %	Chart Area %			
Sales and marketing	891,345	1,146,548	1,233,173	1,461,921	1,848,093			
% Revenue	31.6 %	31.6 %	28.6 %	28.4 %	29.7 %	28.9 %	28.6 %	0.01
% EBT	(210.3)%	(237.7)%	(448.2)%	9034.2 %	(710.9)%	2625.0 %	(448.2)%	(1.31)
YOY		28.6 %	7.6 %	18.5 %	26.4 %	17.5 %	18.5 %	0.09
CAGR		28.6 %	17.6 %	17.9 %	20.0 %			
General and administrative	347,337	367,724	414,068	486,012	604,087			
% Revenue	12.3 %	10.1 %	9.6 %	9.5 %	9.7 %	9.6 %	9.6 %	0.00
% EBT	(82.0)%	(76.2)%	(150.5)%	3003.4 %	(232.4)%	873.5 %	(150.5)%	(0.41)
YOY		5.9 %	12.6 %	17.4 %	24.3 %	18.1 %	17.4 %	0.06
CAGR		5.9 %	9.2 %	11.8 %	14.8 %			



EBIT	(463,284)	(502,230)	(248,599)	(116,450)	(222,200)			
% Revenue	(16.4)%	(13.8)%	(5.8)%	(2.3)%	(3.6)%	(3.9)%	(3.6)%	0.01
% EBT	109.3 %	104.1 %	90.4 %	(719.6)%	85.5 %	(181.3)%	85.5 %	(0.02)
YOY		Negative	Negative	Negative	Negative	#DIV/0!	#NUM!	#DIV/0!
CAGR		8.4 %	(26.7)%	(36.9)%	(16.8)%			
Net interest and other income	39,532	19,783	(26,535)	132,632	(37,750)			
% Revenue	1.4 %	0.5 %	(0.6)%	2.6 %	(0.6)%	0.5 %	(0.6)%	0.00
% EBT	(9.3)%	(4.1)%	9.6 %	819.6 %	14.5 %	281.3 %	14.5 %	0.02
YOY		(50.0)%	Negative	Negative	Negative	#DIV/0!	#NUM!	#DIV/0!
CAGR		(50.0)%	Negative	49.7 %	Negative			
Provision for (benefit from) income taxes	(5,494)	(1,773)	7,297	(13,191)	106,799			
% Revenue	(0.2)%	(0.0)%	0.2 %	(0.3)%	1.7 %	0.5 %	0.2 %	0.01
% EBT	1.3 %	0.4 %	(2.7)%	(81.5)%	(41.1)%	(41.8)%	(41.1)%	(0.19)
YOY		Negative	Negative	Negative	Negative	#DIV/0!	#NUM!	#DIV/0!
CAGR		(67.7)%	Negative	33.9 %	Negative			
Net income (loss)	(418,258)	(480,674)	(282,431)	29,373	(366,749)			
% Revenue	(14.8)%	(13.3)%	(6.5)%	0.6 %	(5.9)%	(4.0)%	(5.9)%	0.00
% EBT	98.7 %	99.6 %	102.7 %	181.5 %	141.1 %	141.8 %	141.1 %	0.19
YOY		Negative	Negative	Negative	Negative	#DIV/0!	#NUM!	#DIV/0!
CAGR		14.9 %	(17.8)%	Negative	(3.2)%			
Net income (loss) per share, basic (in dollars per share)	(1.93)	(2.12)	(1.19)	0.12	(1.44)			
% Revenue	(0.0)%	(0.0)%	(0.0)%	0.0 %	(0.0)%	(0.0)%	(0.0)%	0.00
% EBT	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.00
YOY		Negative	Negative	Negative	Negative	#DIV/0!	#NUM!	#DIV/0!
CAGR		9.8 %	(21.5)%	Negative	(7.1)%			
Net income (loss) per share, diluted (in dollars per share)	(1.93)	(2.12)	(1.19)	0.12	(1.44)			
% Revenue	(0.0)%	(0.0)%	(0.0)%	0.0 %	(0.0)%	(0.0)%	(0.0)%	0.00
% EBT	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.00
YOY		Negative	Negative	Negative	Negative	#DIV/0!	#NUM!	#DIV/0!
CAGR		9.8 %	(21.5)%	Negative	(7.1)%			
Weighted-average shares, basic (in shares)	216,789	227,185	237,019	247,249	254,819			
% Revenue	7.7 %	6.3 %	5.5 %	4.8 %	4.1 %	4.8 %	4.8 %	(0.01)
% EBT	(51.2)%	(47.1)%	(86.1)%	1527.9 %	(98.0)%	447.9 %	(86.1)%	(0.06)
YOY		4.8 %	4.3 %	4.3 %	3.1 %	3.9 %	4.3 %	(0.01)
CAGR		4.8 %	4.6 %	4.5 %	4.1 %			
Weighted-average shares, diluted (in shares)	216,789	227,185	237,019	254,032	254,819			
% Revenue	7.7 %	6.3 %	5.5 %	4.9 %	4.1 %	4.8 %	4.9 %	(0.01)
% EBT	(51.2)%	(47.1)%	(86.1)%	1569.8 %	(98.0)%	461.9 %	(86.1)%	(0.06)
YOY		4.8 %	4.3 %	7.2 %	0.3 %	3.9 %	4.3 %	(0.02)
CAGR		4.8 %	4.6 %	5.4 %	4.1 %			
Statement of Cashflows								
Depreciation and amortization	198,111	276,278	293,657	343,723	364,357			
% Revenue	7.0 %	7.6 %	6.8 %	6.7 %	5.9 %	6.5 %	6.7 %	(0.00)
% PP&E	24.9 %	29.5 %	30.2 %	30.6 %	30.3 %	30.4 %	30.3 %	0.00
YOY		39.5 %	6.3 %	17.0 %	6.0 %	9.8 %	6.3 %	(0.00)
CAGR		39.5 %	21.7 %	20.2 %	16.5 %			



Capital expenditures, excluding owned real estate projects	(202,507)	(243,694)	(253,380)	(264,267)	(359,552)			
% Revenue	(7.2)%	(6.7)%	(5.9)%	(5.1)%	(5.8)%	(5.6)%	(5.8)%	0.00
YOY		20.3 %	4.0 %	4.3 %	36.1 %	14.8 %	4.3 %	0.16
CAGR		20.3 %	11.9 %	9.3 %	15.4 %			
Balance Sheet:								
Total current assets	2,700,596	3,094,622	4,802,061	5,214,065	8,108,224			
% Revenue	95.7 %	85.3 %	111.2 %	101.5 %	130.4 %	114.4 %	111.2 %	0.10
YOY		14.6 %	55.2 %	8.6 %	55.5 %	39.8 %	55.2 %	0.00
CAGR		14.6 %	33.3 %	24.5 %	31.6 %			
Cash and cash equivalents	638,554	731,141	1,384,181	1,534,273	1,886,311			
% Revenue	22.6 %	20.2 %	32.1 %	29.9 %	30.3 %	30.8 %	30.3 %	(0.01)
% Total current assets	23.6 %	23.6 %	28.8 %	29.4 %	23.3 %	27.2 %	28.8 %	(0.03)
YOY		14.5 %	89.3 %	10.8 %	22.9 %	41.0 %	22.9 %	(0.33)
CAGR		14.5 %	47.2 %	33.9 %	31.1 %			
Marketable securities	1,139,864	1,213,432	2,151,472	2,109,888	4,235,083			
% Revenue	40.4 %	33.5 %	49.8 %	41.1 %	68.1 %	53.0 %	49.8 %	0.09
% Total current assets	42.2 %	39.2 %	44.8 %	40.5 %	52.2 %	45.8 %	44.8 %	0.04
YOY		6.5 %	77.3 %	(1.9)%	100.7 %	58.7 %	77.3 %	0.12
CAGR		6.5 %	37.4 %	22.8 %	38.8 %			
Total current liabilities	2,430,691	2,969,404	4,282,648	5,067,855	4,628,166			
% Revenue	86.1 %	81.9 %	99.2 %	98.6 %	74.5 %	90.8 %	98.6 %	(0.12)
YOY		22.2 %	44.2 %	18.3 %	(8.7)%	18.0 %	18.3 %	(0.26)
CAGR		22.2 %	32.7 %	27.8 %	17.5 %			
Debt, current	232,514	244,319	1,103,101	1,222,443	-			
% Revenue	8.2 %	6.7 %	25.5 %	23.8 %	0.0 %	16.4 %	23.8 %	(0.13)
% Total current liabilities	9.6 %	8.2 %	25.8 %	24.1 %	0.0 %	16.6 %	24.1 %	(0.13)
YOY		5.1 %	351.5 %	10.8 %	(100.0)%	87.4 %	10.8 %	(2.26)
CAGR		5.1 %	117.8 %	73.9 %	(100.0)%			

