

The Only Predictive Cash Flow Solution for Contractors:



Introduction:

What keeps you awake at night? For [Robert Renneker](#), CEO of ClearBuild, it is how to develop the best business strategy to enter a market, how to keep his company profitable, and how to help contractors understand their “real financial picture.” After almost a year and a half of product development, endless meetings and back and forth discussions, finally ClearBuild’s first product is ready to make its debut.

Robert is undoubtedly excited about this product launch of ClearBuild, a startup focused on delivering hassle-free solutions for contractors to understand their “true” financial status. He is confident that his solution is unique and a disruptive force in the market. Yet he also feels worried. Should he shoot for the construction market, or a burgeoning market such as software developers, or other small businesses? Or both? How should he test the temperature of ‘the’ market segment he chooses? What are the strategies that Robert and the team can truly execute? Ultimately, Robert believes the most significant determinant of success for ClearBuild’s launch will be the company’s ability to reach the right target audience with the right message. A message that succinctly communicates the power of a solution with which the target market is not aware of.

At launch, should Robert focus more on initial revenue or adoption rate? Perhaps he might consider expanding his current customer base exclusive of profitability implications? During his prelaunch period, is his current business model working or should he consider an early pivot, and how might this impact his first-year strategy? Lastly, what additional information should Robert consider from an operational and product development perspective?

This case was researched, and prepared, by Ms. Ivy Zhong under the supervision of Professor Gregory L. Stoller as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

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How it Started

Robert Renneker was born and raised in Dallas, Texas. He holds a B.A. in Economics from The University of Texas and a J.D. from Southern Methodist University School of Law. Robert spent most of his career as a general contractor, focusing primarily on the rehabilitation of multifamily properties. Construction firms he has owned and operated have executed projects in dozens of states with contract revenues totaling more than \$1 billion. Robert grew his primary construction firm, Penco Companies, from \$8M in revenue and nominal profitability, when he took over its leadership (eventually acquiring the business), to the largest provider of multifamily property rehabilitation in the U.S., with annual revenues more than \$80 million at 8%¹ EBITDA. His clients have included REITs, private market-rate and low-income-housing-tax-credit developers, insurance companies, sureties, public housing authorities, HUD, and military housing departments.

“We grew the business by focusing on long-term repeat-business relationships and by developing scalable, repeatable systems. Our primary scorecard at the end of a project was the client’s willingness to use us for their next project.”²”

Robert benefited greatly from tight financial controls and continuous forecasting. He worked closely with outstanding team members in finance and accounting, managed the business from detailed and timely financials and brought outside firms annually to produce audited statements. As a self-described data-geek himself, Robert came to appreciate over time the layers of insight that lay within a company’s financial data.

The genesis of ClearBuild was Robert’s realization that he enjoyed the visibility and understanding of his company’s financial performance and trajectory. Something that is not accessible or understood by many contractors.

¹ Profitability was a function of good operations, but also reflects the margins available in the re-construction market, which are much higher than those typically found in commercial new construction.

² Entrepreneur interview, October 7, 2021.

“I was a business owner with fairly solid fluency in the numbers and a team of people who knew more than I did about how to tease the often-nuanced knowledge I wanted from the financial data. They taught me a lot. What’s more, our work was supported by a sophisticated accounting platform specifically designed for construction. We spent hundreds of thousands of dollars on our software and on implementing, maintaining, and feeding it. We had tremendous advantages in our ongoing quest to really understand where the business stood and where it was headed. Most contractors don’t have access to even a fundamental understanding of where they really stand. Other than the largest firms, most navigate their business in continual fog with few instruments to guide them.”³

ClearBuild represents the answer to a series of what-ifs that flowed from Robert’s realization: What if contractors of any size, with or without construction-specific accounting software, perhaps without any real accounting knowledge, could see what I see. What if there was a tool that pulled data from a contractor’s books, converted the data to percentage-of-completion, automated the analysis a team of MBAs could perform, and presented the most important, actionable insights simply and graphically to the business owner or manager?

Robert joined forces with another construction industry leader, Jay Calvert, to turn these ideas into a business. Robert and Jay have worked together for many years, partnered on various real estate developments, and are long-time friends. Jay owns and operates his own construction firm in Orlando, Florida.

³ ibid., Entrepreneur interview

Known Unknowns

“It’s strange that an industry as large and mature as construction would have such glaring inefficiencies. But it’s as true today as it was when I first noticed that most contractors don’t know – and really don’t know how to know – where they really stand. It’s impossible to have a firm grasp on your financial position or to make reasonable projections without unwinding your overbillings and under-billings. Doing this starts with accounting for every project on a percentage-of-completion basis. For most contractors, even many, large ones, this whole area is mysterious. It isn’t that complicated but unless they dig in a bit to understand it contractors see percentage-of-completion accounting as a kind of black box best left to their CPA to figure out at tax time. Meanwhile they operate their business half in the dark.”⁴

Robert notes that despite the availability of construction-specific accounting software, and professional, certified accountants, most contractors lack access to, or understanding of, percentage of completion accounting. They have software for bookkeeping and taxation purposes but do not really address the ‘gap’ mentioned above. As Robert noted:

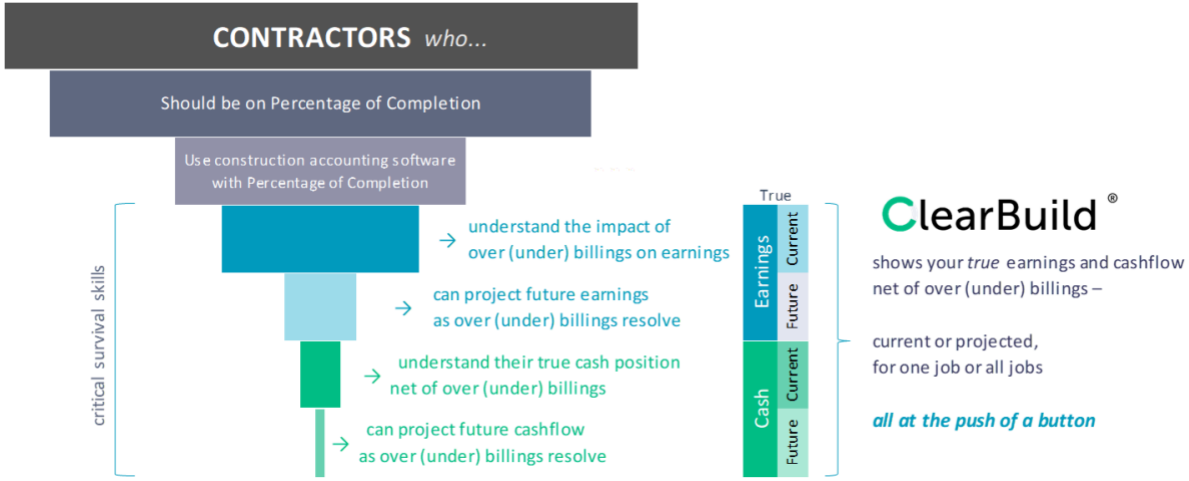
“The makeup of the construction accounting software market contributes significantly to the fact that so many contractors still navigate their companies in the fog. Contractors need to understand their business in the context of percentage of completion; they need to know their true position net of overbillings and under-billings. Yet, GAAP-compliant accounting platforms tailored to the construction industry are expensive and cumbersome to implement and operate. A company needs to have the wherewithal – both financially and in terms of staff and back-office competency – to purchase, implement and operate these programs. I spent over \$100,000 the last time we changed accounting software, and that was the initial ticket price before recurring license fees. Our team worked with (and paid for) an implementation team just to get it set up and working correctly. It’s a real commitment. So, most contractors rely on canned software like, say, QuickBooks. These applications are really the wrong tool for all but the smallest of contractors. They don’t do percentage-of-completion accruals and they lack entirely the ability to present truly actionable financials for contractors.”⁵

⁴ *Ibid.*, Entrepreneur interview

⁵ *Ibid.*, Entrepreneur interview

It's problematic enough for contractors that so few have access to construction-appropriate accounting software. Fewer still appreciate the degree to which their earnings are misstated if they don't account for the over (or under-billings) and which percentage of completion accounting calls out. And even for those with access to percentage of completion accounting and a solid understanding of earnings, virtually none can apply those insights to the arena of cashflow. In fact, prior to ClearBuild no software on the market has ever translated over (under) billings through their impact on the lifeblood of the business – cash. Many contractors are plagued by tight cashflow because of chronic under-billings; others can only wonder when (or if?) they are going to hit a cash wall as they begin to come out of pocket to fund the completion of projects that have theretofore been heavily overbilled. With multiple projects at various stages of progress and at different levels of over or under-billings, knowing how much of the money in your accounts is (truly) yours, becomes a hopelessly incalculable puzzle.

In 2019, Robert decided to develop a tool for contractors of any size to understand their finances with the clarity that only the most sophisticated firms have traditionally enjoyed. Jay Calvert and he began exploring a possible partnership to pursue the opportunity and formed ClearBuild Technologies, Inc. In December of 2020, ClearBuild signed a development agreement with MindTrust Labs, LLC, a software development firm based in New Haven, Connecticut. Product design and development began in earnest in early 2021.



ClearBuild

Overbillings & Under-billings

A project is overbilled when the percentage of the contract for which the contractor has billed the customer to date exceeds the percentage of the work that the contractor has completed to date. Conversely, if the contractor has billed proportionately less of the contract than the portion of the work that has been completed, the project is underbilled. Overbillings and under-billings each have various possible causes and potential negative consequences. While some level of overbillings or under-billings is virtually inevitable, significant over (under) billings can wreak havoc on a contractor's business. Significant overbillings can put the contractor out of business altogether.

Some common causes of overbilling include the following: deposit or mobilization billings issued, by their nature, prior to the completion of a commensurate amount of work; a 'front-loaded' schedule of values that places disproportionately high value on the portions of the work that occur early in the project. For example, contractors often assign a higher percentage of the contract to sitework and utilities, foundations and other items that occur near the beginning of the project. Some amount of overbilling, say up to a percentage comparable to the project's gross margin, is appropriate, helps avoid cashflow problems, and can reflect a well-run contracting firm. The very real danger with overbillings, however, arises when they are significant and are not sufficiently considered by management. A project that is significantly overbilled well into its production can eventually reach a point where the remaining costs to be borne by the contractor greatly exceed all remaining billings to the customer.

Under-billings are never desirable and often indicate weaknesses in one or more areas of the contractor's operations. A contractor who is consistently late getting invoices out to customers or who fails to track and bill for everything that can rightfully be claimed will have under-billings and will weaken cashflow as those under-billings make the contractor an unwitting *lender* to its clients. Moreover, significant under-billings can be a red flag warning of more specific problems. Underwriters for bonding companies and lenders often study a contractor's under-billings looking for indications that there are change orders the contractor has booked that have not been agreed by the customer (and for which the customer may not ultimately pay), or that a project's budget is has been underestimated and profit fade is inevitable.

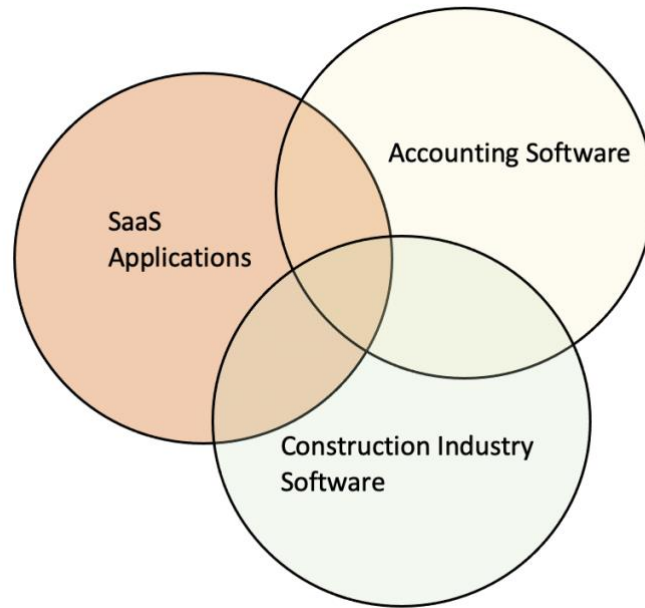
Understand the Numbers

ClearBuild gives contractors visibility into the company's "real" earnings and cashflow, enabling more informed decisions and planning, including bidding new projects, reallocating money for current projects, hiring more laborers etc. **Exhibit 1** features screenshots. Consider a contractor who just secured multiple projects totaling \$10M dollars, and just received his / her/ their first project payments. But what is the true financial reality? Is that project (actually) profitable or is the current bank balance a mere placeholder? Equally importantly, is it time to bid on the next project or should he / she / they stop and just focus on the project in hand? What about the overall revenue forecast for the entire year? These questions cannot be answered by his instinct or gut; it is about data and numbers. ClearBuild makes it possible for contractors of any size to understand their earnings and cashflow and to predict the future with a clarity previously available only to contractors paying hundreds of thousands of dollars for software and analysts. ClearBuild provides contractors with the first-ever holistic view of cashflow, that is: cashflow net of overbillings and under-billings. At \$149 / month and synchronizing with contractors' existing accounting system ClearBuild is helping to democratize the construction industry.

You Cannot Have It All

ClearBuild offers seamless integration with the user's existing accounting system. The company's initial release includes synchronization with QuickBooks Online, one of the most popular accounting software packages for small and mid-sized businesses. Additional API's will be mapped and sync functionality. Additional accounting software integrations will be added on a rolling basis. The company is developing a mobile app for use in the field, as well.

Market Overview



The market is estimated around \$3.03B based on the SaaS, Accounting Software for the Construction Industry, and the general construction software market.

SaaS Applications

ClearBuild is web-based, serving contractors as a convenient tool for overseeing and predicting cash flows accurately, yet the core competency and competitive advantage is not the accounting piece but more of a pain point solution-based application. It's a SaaS-based software licensing and delivery model, in which software is licensed on a subscription basis and is centrally hosted. The U.S. SaaS market is estimated to be worth approximately \$145.5B (see **Exhibits 2 and 3**), with the global SaaS) market size projected to reach \$307.3B by 2026, from \$158.2B in 2020, at a CAGR of 11.7% during 2020-2026 ^{6,7}.

⁶ <https://techstartups.com/2021/06/16/global-software-service-saas-market-projected-reach-305-billion-2026/> (accessed December / 2021)

⁷ <https://reports.valuates.com/market-reports/QYRE-Othe-1G311/covid-19-impact-on-global-software-as-a-service> (accessed December / 2021)

[QuickBooks](#) is one of the largest SaaS applications focused on accounting. It does numerous accounting related tasks automatically for end users, thus saving them time and labor. It's most frequently used by mid-size to small size businesses and a great way to keep track of cash flow with easy set up. QuickBooks' competitive advantage is around functionality, requiring no manual data entry, scaling as the company grows, and enabling easy tracking of a company's financial health with custom financial reports and with support and help from the community.

QuickBooks is under Intuit's Small Business and Self-Employed Group Business Segment and as reported in Intuit Annual Report⁸, QuickBooks Online accounting revenue grew 28% for the quarter and 25 percent for the year with revenue approximately close to 5.08M as of July 2021. It is not hard to tell that QuickBooks aims to serve small businesses and the self-employed around the world, to solve their financial and compliance problems. They are also enabling other solutions such as online payments, and payroll to enlarge their current product portfolio. In the recent Annual Report provided by Intuit, they mentioned leveraging AI, to enable automation and data insights. This strategic move will allow QuickBooks to grow and scale and while the detail is not yet revealed, we can assume that the company is also improving its software to enhance data analytics.

Accounting Software for the Construction Industry

It is not surprising the market for accounting software also overlaps with the SaaS application market. Considering the trends in the past two decades - numerous changes in the financial and accounting software solution market from paper to cloud: one being the cloud-based offering of accounting software solutions.

The Accounting Software Market was valued at \$12.01B in 2020 and is expected to reach \$19.59B by 2026, a CAGR of 8.5% over the forecast period 2021 - 2026⁹. [Sage 50](#) and [Xero](#) are other relatively big players in this same segment. Among these top 5 players, three places are occupied by QuickBooks but with different product lines.

⁸ <https://investors.intuit.com/financials/annual-reports/default.aspx> (accessed December / 2021)

⁹ Market Size <https://www.mordorintelligence.com/industry-reports/accounting-software-market> (accessed December / 2021)

Ranking	Technology	# of Users (Company)	Market Share
1	QuickBooks by Intuit	181,068	73%
2	Sage 50	17,641	7%
3	Xero	14069	<5%
4	QuickBooks Online by Intuit	4,760	<5%
5	QuickBooks Desktop by Intuit	3,708	<5%
6	QuickBooks Desktop Enterprise	3,016	<5%
...

¹⁰ Source: <https://enlyft.com/tech/accounting> (tracked down 33 products in the Accounting category and 245,646 companies using these products) (accessed December / 2021)

QuickBooks' customer base is wide, not just limited to the Construction Industry. As reported, among all those tracked companies, Construction takes 7%, Computer Software takes 6% and Hospital & Health Care takes also 6% which consist of the largest segments (**See Exhibit 3**).

Construction Software

Construction Software is also a market that ClearBuild falls into. Not surprisingly, the market is also rapidly evolving under the influence and emerging of cloud-based technologies. This software is more versatile and not restricted to a sole function. The packages often offer one-stop shopping from pre-sale from (i.e., lead / customer acquisition), to post sales activities (i.e., issuing invoice, process payment, etc.). The construction software market is relatively smaller than the Construction Industry Market by revenue, with \$8,722M with CAGR 3.1%, from 2019 - 2024¹¹. Here are some of the leading competitors targeting a mid-small sized business. According to Robert:

“We don’t consider Oracle to be relevant at all, nor is Houzz. Both BuilderTREND and CoConstruct are project management apps but we really watch these (and they are on our API-dev list): Sage, Viewpoint, Spectrum, Foundation, Jones and ComputerEase.¹²”

¹⁰ Accounting Software Market Share and Players <https://enlyft.com/tech/accounting> (accessed December / 2021)

¹¹ Construction Software Vendors, Market Size and Market Forecast 2019-2024 <https://www.appsruntheworld.com/top-10-construction-software-vendors-market-size-and-market-forecast-2019-2024/> (accessed December / 2021)

¹² Ibid, Entrepreneur interview.

Following Robert's lead there are, indeed, other Players in the industry, as well:

BuilderTREND Software is one of the most popular construction software products, providing one-stop solution, from pre-sales, pre-built CRM, project management, and customer management, and offers flexibility to link with other solutions, like QuickBooks. The charges range from \$99 to \$499 per month. According to the news, by 2021, it has acquired more than 15,000 customers with revenue of \$42.3M¹³.

CoConstruct Software is another software solution that people frequently use. The functionality is similar to BuilderTREND, but the cost is much less, starting at \$49 and scales up depending on the number of projects. The company experienced rapid growth recently: achieved 14.8M in 2021 second quarter with a growth rate higher than industry average¹⁴.

It's not hard to tell that the current construction software is more focused on sales and project management, and most of them offer integration of QuickBooks, Xero integration etc. Considering the post-pandemic, the increasing numbers of projects or re-construction projects is expected to facilitate the software market growth. People's needs also shift from time to time, the management tool is evolving and improving, so as the end users' needs.

This could be a perfect opportunity for ClearBuild to offer a turn-key solution for better monitoring cash flow, and more focused revenue and profitability predictions.

Decision Point

Robert's plan over the next few months is to concentrate on the company's multi-channel go-to-market strategy and on proving methods and cost per customer acquisition. With traction and a well-documented understanding of customer acquisition, the company plans to undertake an initial capital raise of approximately \$1.5M to facilitate more aggressive marketing and further product enhancements.

¹³ <https://getlatka.com/companies/buildertrend> (accessed December / 2021)

¹⁴ <https://www.konaequity.com/company/coconstruct-4019702532/> (accessed December / 2021)

Study Questions:

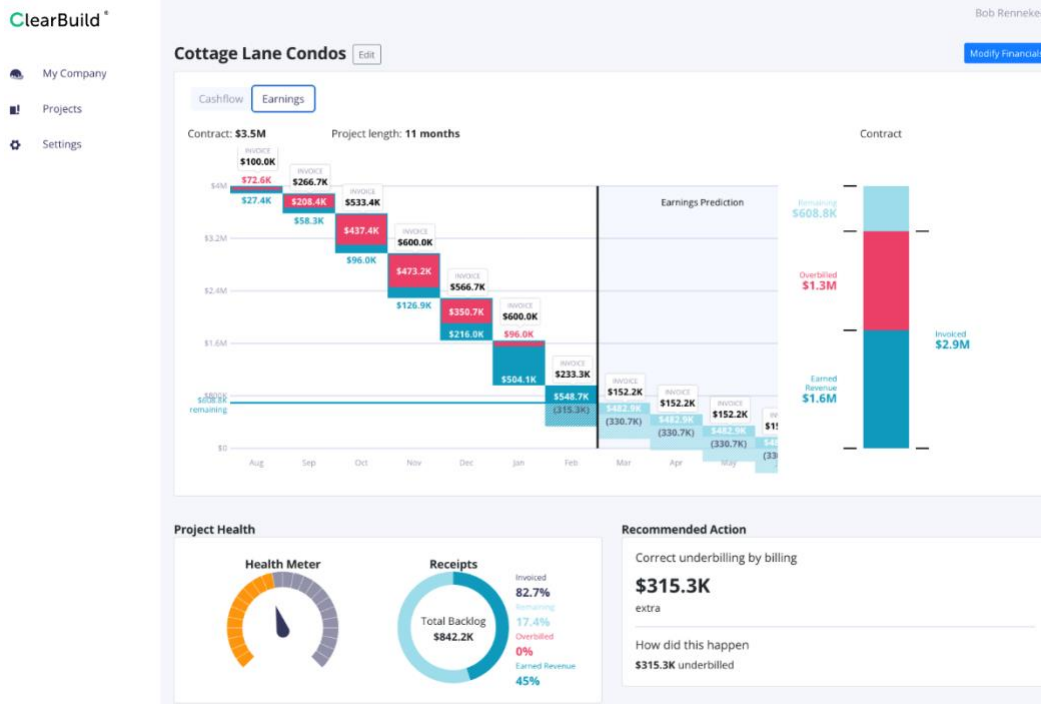
1. Robert currently has 12 months of cash on his balance sheet with burn rate of \$15 - \$20,000 / month. Before cash runs out, what is the best use of the remaining time and resources before his next capital raise estimated \$1.5M in 6 months?
2. At launch, should Robert focus more on initial revenue or adoption rate? Perhaps he might consider expanding his current customer base exclusive of profitability implications?
3. During his prelaunch period, is his current business model working or should he consider an early pivot, and how might this impact his first-year strategy?
4. Finally, what additional suggestions should Robert be gleaning from an operational and product development perspective?

Exhibit 1: ClearBuild screen shots

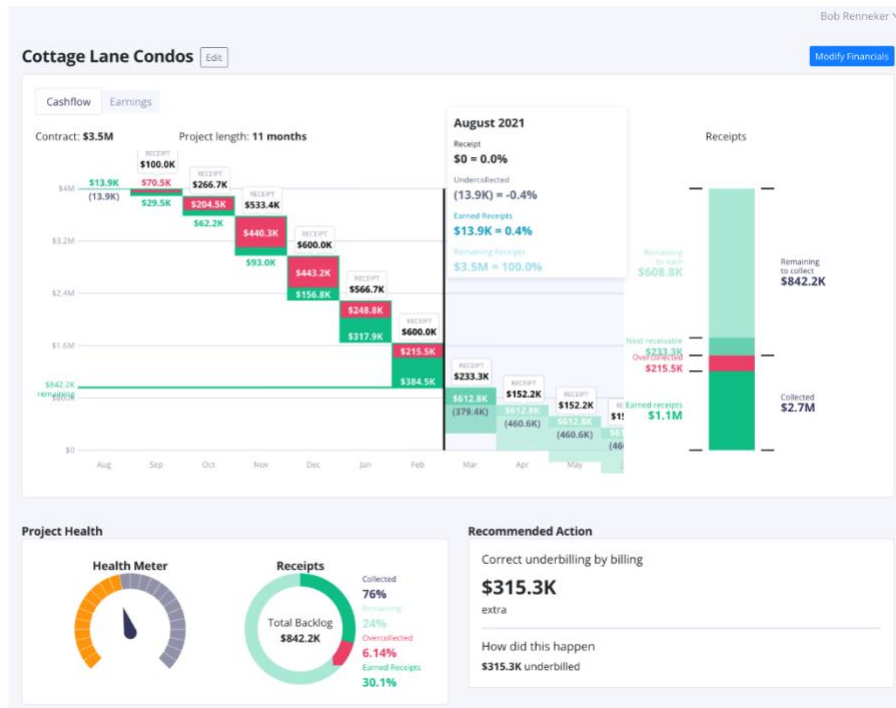
Earned Revenue, all projects



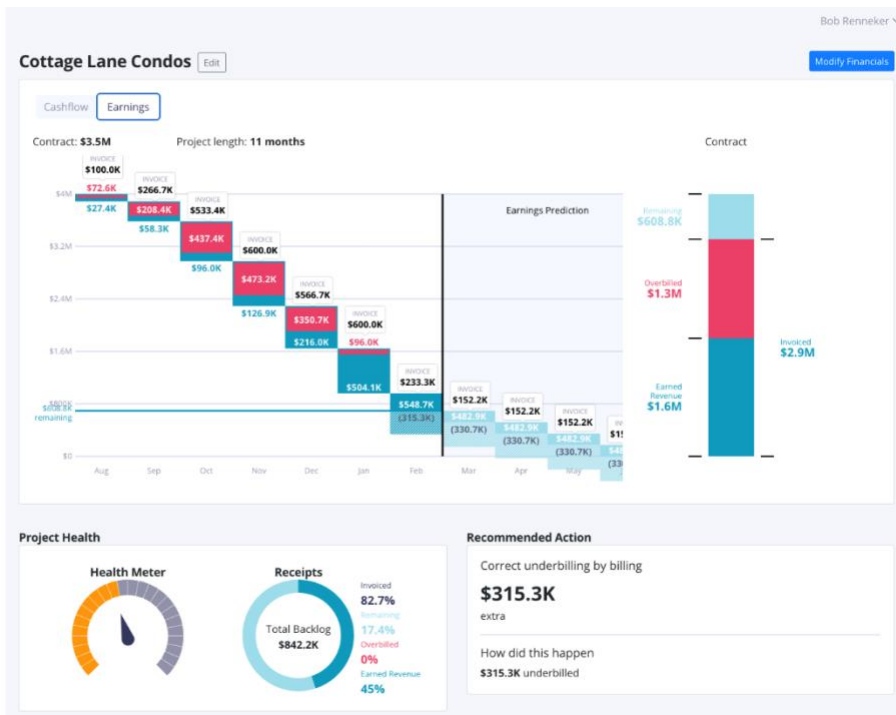
Project Revenue



Project Cashflow with popup on month hovered



Project Earned Revenue by Month



Health Meter



Receipts



Collected
\$4.23M

Remaining
\$10.57M

Overcollected
\$795.5K

Earned receipts
\$3.92M

Create Project from QuickBooks Sync

The screenshot shows the 'Modify Financials' page in the ClearBuild application. The page title is 'Modify Financials' and it includes a subtitle 'Change the cost or contract price here.' There are 'Cancel' and 'Update' buttons at the top right. The main content is a table with columns for 'Change', 'Date', 'Contract Change', 'Change in Est'd Cost', 'Change in Est'd Gross Profit', and 'Notes'. The table shows three individual change events and a total summary. The 'Original' values are \$1,374,000 for Contract Change, \$1,129,000 for Change in Est'd Cost, and \$245,000 for Change in Est'd Gross Profit, with a 17.8% margin. The three change events are: 1. April 2021, \$50,000 Contract Change, \$40,000 Change in Est'd Cost, \$10,000 Change in Est'd Gross Profit, Note: 'Change Order 1'. 2. June 2021, \$0 Contract Change, \$25,000 Change in Est'd Cost, -\$25,000 Change in Est'd Gross Profit, Note: 'CO 2'. 3. July 2021, \$20,000 Contract Change, \$20,000 Change in Est'd Cost, \$0 Change in Est'd Gross Profit, Note: 'CO 3'. The 'Total' row shows a net change of \$70,000 in Contract Change, \$85,000 in Change in Est'd Cost, and -\$15,000 in Change in Est'd Gross Profit. The 'After Changes' row shows updated values: \$1,444,000 Contract Change, \$1,199,000 Change in Est'd Cost, and \$230,000 Change in Est'd Gross Profit, with a 15.9% margin. There is an 'Add new event' button at the bottom of the table.

Change	Date	Contract Change	Change in Est'd Cost	Change in Est'd Gross Profit	Notes
	Original	\$1,374,000	\$1,129,000	\$245,000	17.8%
1	April 2021	\$50,000	\$40,000	\$10,000	Change Order 1
2	June 2021	\$0	\$25,000	-\$25,000	CO 2
3	July 2021	\$20,000	\$20,000	\$0	CO 3
4	Add new event				
	Total	\$70,000	\$85,000	-\$15,000	
	After Changes	\$1,444,000	\$1,199,000	\$230,000	15.9%

Change Orders, Budget Changes

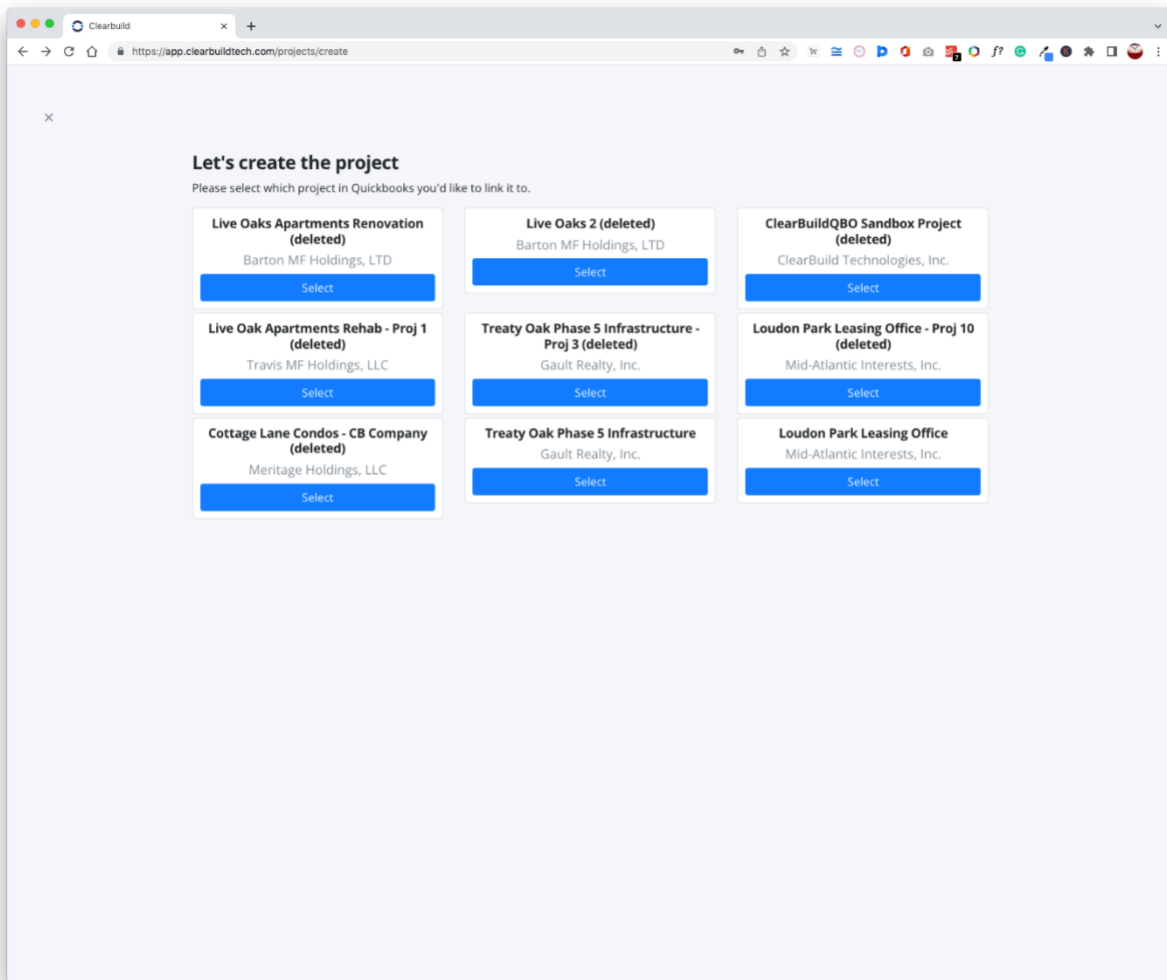
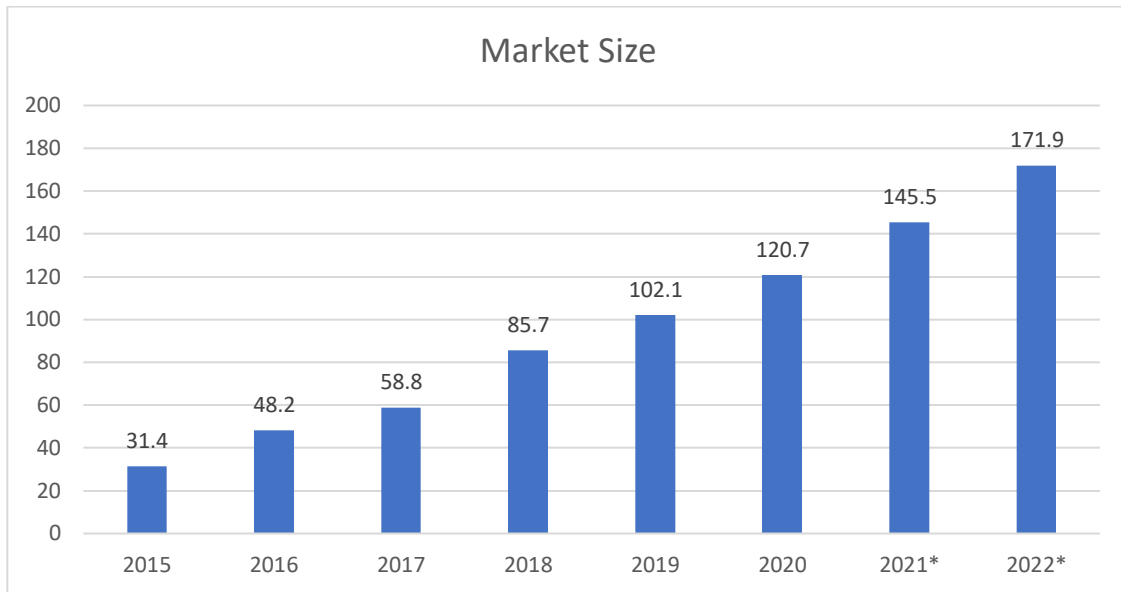
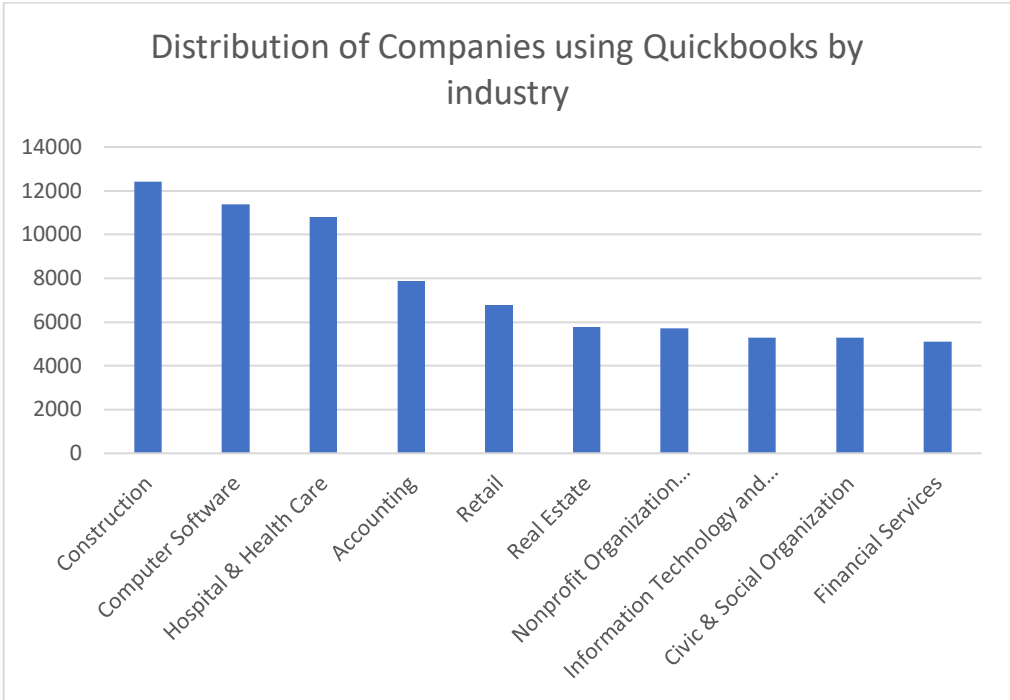


Exhibit 2



<https://www.statista.com/statistics/505243/worldwide-software-as-a-service-revenue/#:~:text=In%202021%2C%20the%20software%20as.as%20through%20a%20web%20interface> (data accessed December / 2021)

Exhibit 3



Source: <https://enlyfi.com/tech/products/quickbooks> (data accessed December / 2021)