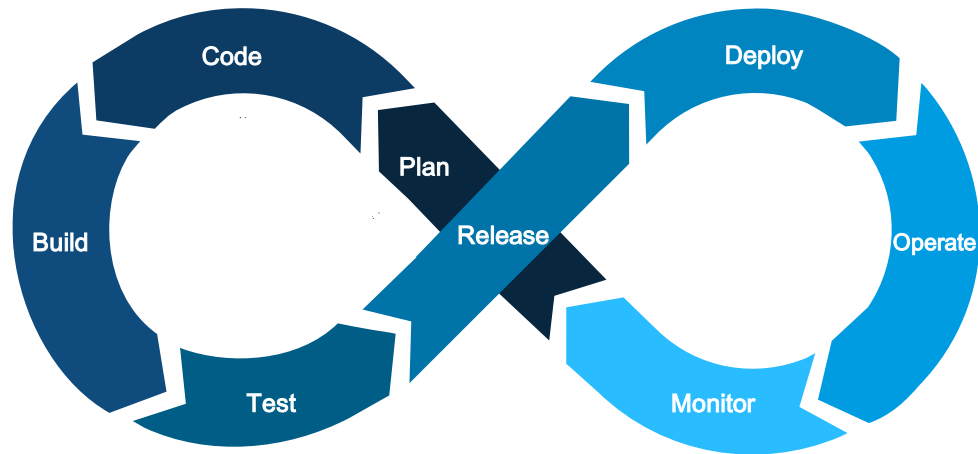


February 11, 2021

What's New in the 'New Stack'?



Deep Diving Into the Low-Code and No-Code Market

Sanjit Singh
sanjit.singh@morganstanley.com
(415) 576-2060

Keith Weiss
keith.weiss@morganstanley.com
(212) 761-4149

Melissa Dunn
melissa.dunn@morganstanley.com
(212) 761-3564

Mark Rende
mark.rende@morganstanley.com
(212) 761-6952

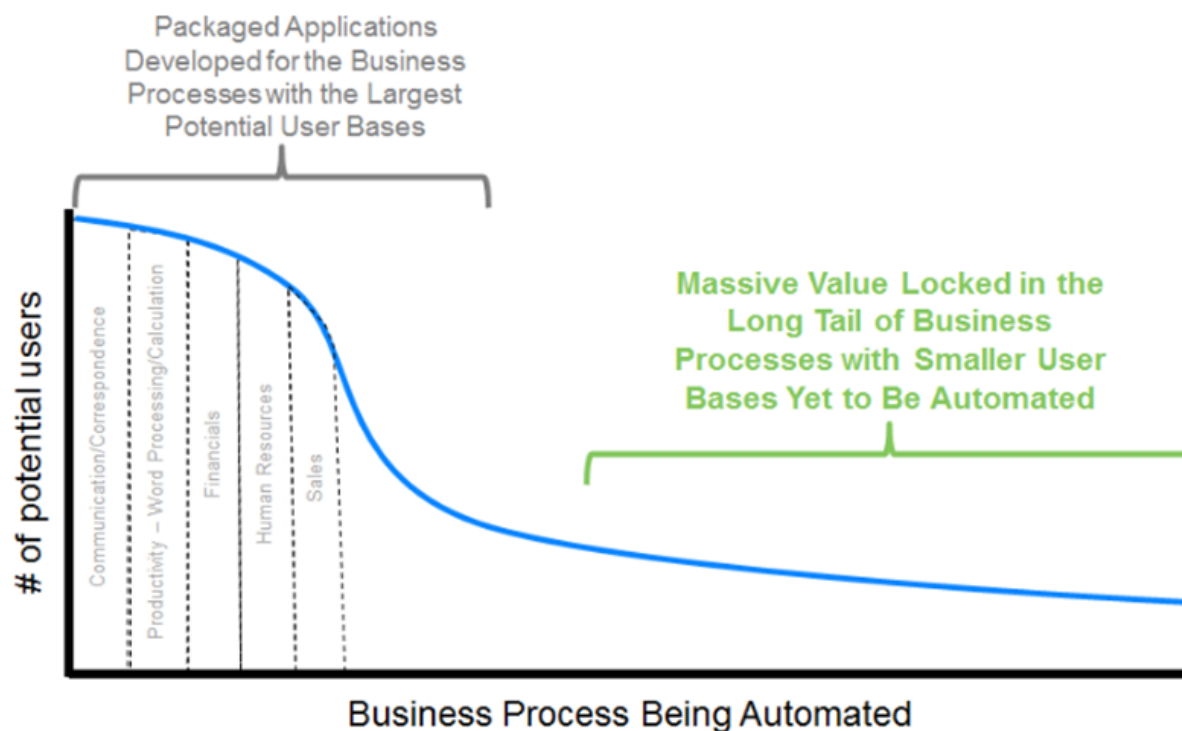
Peggy Yu
peggy.yu@morganstanley.com
(212) 761-1736

Morgan Stanley does and seeks to do business with companies covered in Morgan Stanley Research. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of Morgan Stanley Research. Investors should consider Morgan Stanley Research as only a single factor in making their investment decision.

For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report.

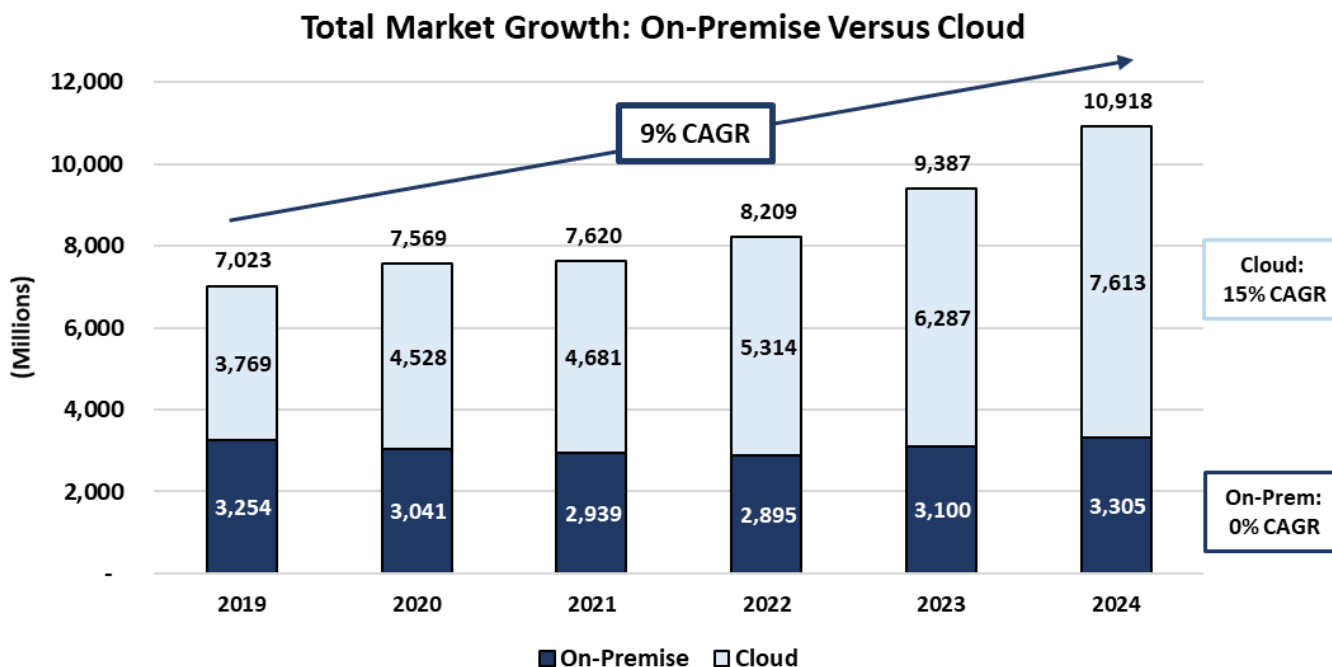
Why Are We Talking About Low-code / No-Code?

1) Software is Eating the World... But Software Developers Are in Short Supply



Why Are We Talking About Low-code / No-Code?

- 1) Software is Eating the World... But Software Developers Are in Short Supply*
- 2) Big Market Today... But Likely Bigger than People Think Moving Forward*

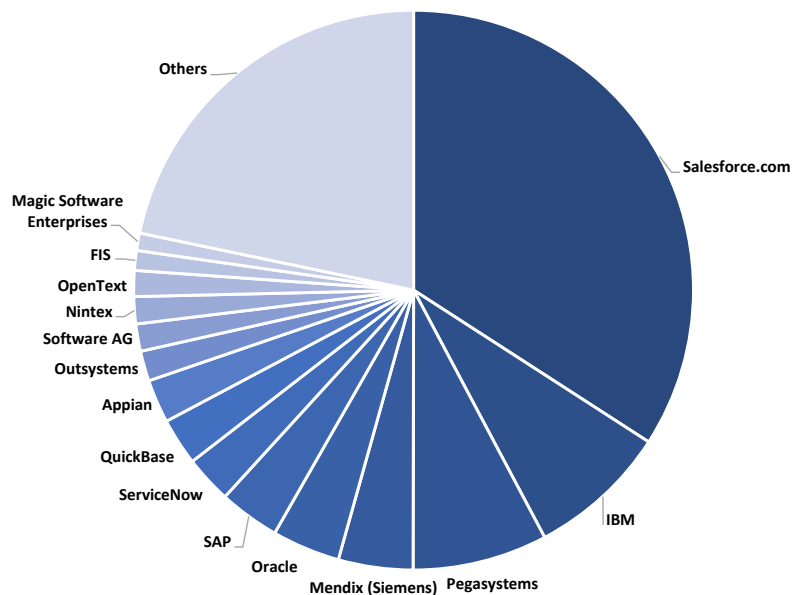


Market Growth Coming From Cloud: IDC estimates suggest **\$7.6Bn** spend on low-code / no-code software in 2020, which is expected to grow at a **9% 5-year CAGR** (2019-2020) to **\$10.9 Bn** by 2024

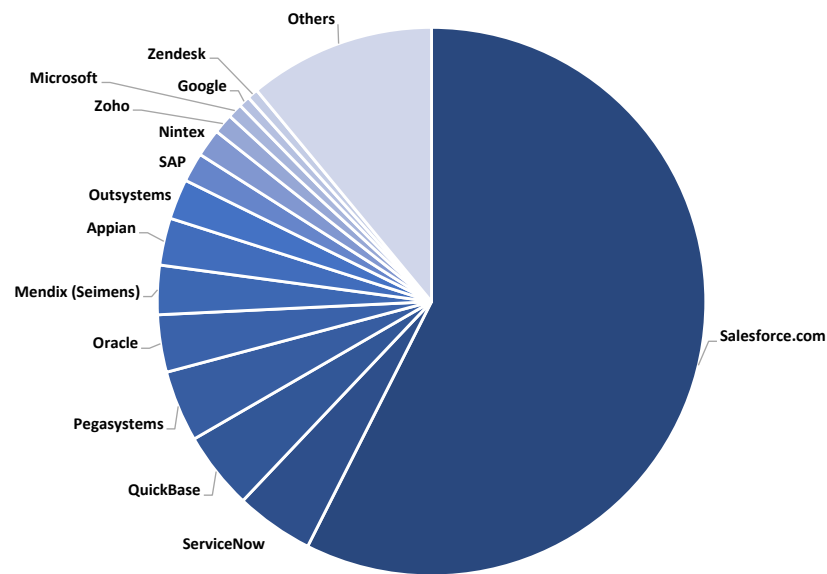
Why Are We Talking About Low-code / No-Code?

- 1) Software is Eating the World... But Software Developers Are in Short Supply***
- 2) Big Market Today... But Likely Bigger than People Think Moving Forward***
- 3) Market Shares Likely to Shift Going Forward***

Market Share Model-Driven Application Platforms By Vendor, 2020



Cloud-Based Market Share Model-Driven Application Platforms By Vendor, 2020



Defining The Market

What Is Low-Code Development?

Definition: Low-code is a visual approach to software development. Low-code offers visual modeling, automation, reusability, and other tools to reduce the amount of code required in the application lifecycle and enable rapid, more efficient delivery of a variety of software solutions.

<u>Typical Users</u>	<u>Typical Apps Built</u>
<ul style="list-style-type: none">• Professional developers• Technical users with some scripting, data transformation and process modeling skills	<ul style="list-style-type: none">• Both web and mobile apps• Apps that automate core business processes or workflows that span departments• Apps that integrate core business systems• Established apps that have defined processes• Apps intended to have a longer life cycle (5+ years) with infrequent updates

“Low-code platforms take the traditional development process and streamline it, making it faster for skilled developers who would otherwise have to take a longer and more resource intensive route.”

-- Mark Levitt, Senior Marketing Manager, Quick Base, Inc.

Defining The Market

What Is No-Code Development?

Definition: A platform that uses a visual development environment to allow any end user to create complete applications, through methods such as drag-and-drop, pre-built components and templates. No-code platforms prohibit any coding or scripting to enable faster productivity.

<u>Typical Users</u>	<u>Typical Apps Built</u>
<ul style="list-style-type: none">• Non-technical business users• Citizen developers	<ul style="list-style-type: none">• Apps used for capture, tracking, reporting and processing• Apps that help simplify a manual tasks for end users• Apps that are evolving and may need continued changes/development over time• Apps with a life cycle that spans from months to years• Apps that require minimal integration with other systems

"The future of coding is no coding at all," - Chris Wanstrath, CEO, GitHub

"If you want to have your entire organization building solutions and solving their own challenges, regardless of what skills they have or don't have, then you need a no-code platform."

-- Mark Levitt, Senior Marketing Manager, Quick Base

Defining The Market

Why Low-Code / No-Code?

➤ **Software Developers Are Scarce and Expensive.**

- By 2021, expect a shortage of 1.4 million professional software developers in the U.S
- When developers leave an organization this can often cause significant disruption to operations
- Average software developer salaries are ~\$100K and often much higher for senior developers
- Employees can be trained on Low-Code / No-Code platforms often in several weeks or in a few months to be come productive

➤ **Traditional Custom Software Applications Can be Difficult to Update**

- As business evolves, updating the business logic can be a difficult and tedious process
- Creates friction to innovation and responding effectively to changing business conditions

➤ **Low-Code / No-Code Can Dramatically Accelerate Development Velocity & Speed to Market**

- IDC study showed Appian reduced the development cycle by 62% on average
- Forrester study showed Mendix accelerating development times by 6x to 10x
- Unqork cites 2-3 month development time on its No-Code platform vs. 9-12 months for an enterprise application for equivalent level of complexity
- In addition, low-code / no-code platforms allow customer to build and manager their applications with fewer resources which enhances the ROI

Defining The Market

Common Misperception About the Market, In Our View...

- **More Than Just Reducing or Eliminating the Coding Effort**
 - Embeds security across the entire software development lifecycles
 - Automated testing
 - Automated publishing / deployment to cloud (private, public) and to the major mobile platforms
 - Many platforms include monitoring, logging and debugging capabilities
- **Adoption Is Not Primarily Line of Business Users (Yet)**
 - Professional developers are often the primary users of low-code platforms
 - Some IT roles (such as business analysts) or operations personnel are being converted
 - Line of business penetration is still in the early days and often encounters friction to adoption
 - While users may not have to write code, they often have to think like developers to be effective
 - Hearing cases where “low-code” developers are being paid more than traditional custom software developers
- **It's Not Just “Simple” Applications That Are Being Built**
 - Application complexity is increasing on low-code / no-code platforms
 - Processing and data intensive apps embedding workflow automation are increasingly common
 - Customer-facing transactional applications with enterprise scale are also on the rise

Defining The Market

What Are the Customer Concerns?

- **Do Low-Code and No-Code Platforms Result in Vendor Lock-in?**
- **What If Current Software Developers Don't Want to Do This Type Development?**
 - Some developers may view low-code development as not as interesting or intellectually stimulating
- **What If Technical or Line of Business Employees Don't Want to do Development Work?**
 - Some may not want to add app development to their day-to-day responsibilities
- **What if IT Thinks That This Is Not a Good Idea?**
 - IT may view development by business users as a risky proposition with significant operational and security implications if access to key systems and resources are not heavily governed

Investor Debate #1

Will Low-Code / No-Code Penetrate Line of Business Users to Help With the Development Effort?

MS View: Time will tell whether low-code / no-code vendors will be able to penetrate line of business users. However, currently we believe many current users of these solutions are professional developers and/or highly technical individuals in IT or engineering. To enable wider adoption and increased the probabilities of success, formal training programs likely need to be established to help line of business users “think” like a software developer even when there is minimal coding effort required.

Investor Debate #2

What Approach Will Dominate: Low-Code or No-Code App Development ?

MS View: The trends towards more abstraction and virtualization is a durable theme across many parts of software spanning many decades. However, we think mix of Low vs. No Code will largely depend on use cases where activities such as web and mobile development (particularly for non-customer facing use cases) are likely captured by No-Code platforms whereas workflow automation and process automation are likely to continue to be the purview of Low-Code platforms (and robotic process automation solutions).

Investor Debate #3

Is Low-Code a Standalone Market or Feature of Modern Software Platforms?

MS View: We see the low-code, no-code movement evolving rapidly on 2 fronts – 1) software vendors enhancing their current solutions with low-code / no-code capabilities to reach a broader audience of users and 2) growing adoption of standalone low-code / no-code platforms to accelerate time to market and enable a faster pace of digital innovation

Investor Debate #4

Is RPA Complementary or a Threat to the Low-Code, No-Code Market?

MS View: In its current state, we see low-code and RPA platforms as largely complementary in that Low-Code / No-Code platforms help identify the manual processes to be digitized, which create new workflows that can be automated with RPA platforms.

Investor Debate #5

Market Share: Fragmented or Winner Take Most/All?

MS View: Likely to remain fragmented where specific types of applications will self-select into different low-code / no-code application platforms.

Market Map

Vendor Profile: Unqork**Quick Facts:**

- Cloud-native, visual, [no-code](#) application development platform
- Single-tenant and cloud agnostic (AWS, Google Cloud, or Microsoft Azure)
- Runs on [Kubernetes](#) and [MongoDB Atlas](#)
- Industry specific focuses on Insurance, Financial Services, Government, and Healthcare
- Partner program allows SIs and consulting firms to help customers onboard Unqork, while its technology partner program enables native integrations with other technologies
- Founded in [2017](#)

Customer Traction:

- [50+](#) clients with [300+](#) applications in productions
- Deployed in [10+](#) countries across the world
- Backed by [\\$400+](#) million in private funding

Customer Case Studies:**Goldman Sachs:**

Business Problem: Needed an application to streamline the application collection process of Goldman's in-house incubator, GS Accelerate.

Unqork Solution: As part of the proof of concept, the business owners of GS Accelerate were able to leverage the Unqork platform and build out an application on their own without involving the lengthy process of IT development.

Maimonides Medical Center

Business Problem: Needed a broad-based solution to enable digital transformation and modern care delivery.

Unqork Solution: Chose Unqork for its native integrations with a large number of systems, ability to securely handle healthcare data, and its high-fidelity user interface.

Liberty Mutual

Business Problem: Initially needed a fix for a problematic application used by its Colombia business.

Unqork Solution: The new application, made with the Unqork platform, was rolled out to 20 different areas in the US in addition to Colombia. The CIO believes Unqork's application development process was three times faster and three times less expensive.

Disclosure Section

The information and opinions in Morgan Stanley Research were prepared by Morgan Stanley & Co. LLC, and/or Morgan Stanley C.T.V.M. S.A., and/or Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., and/or Morgan Stanley Canada Limited. As used in this disclosure section, "Morgan Stanley" includes Morgan Stanley & Co. LLC, Morgan Stanley C.T.V.M. S.A., Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., Morgan Stanley Canada Limited and their affiliates as necessary.

For important disclosures, stock price charts and equity rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures, or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY, 10036 USA.

For valuation methodology and risks associated with any recommendation, rating or price target referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: Sanjit Singh, Keith Weiss.

Unless otherwise stated, the individuals listed on the cover page of this report are research analysts.

Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at www.morganstanley.com/institutional/research/conflictolicies. A Portuguese version of the policy can be found at www.morganstanley.com.br

Important Regulatory Disclosures on Subject Companies

The equity research analysts or strategists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors, firm revenues and overall investment banking revenues. Equity Research analysts' or strategists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

Morgan Stanley and its affiliates do business that relates to companies/instruments covered in Morgan Stanley Research, including market making, providing liquidity, fund management, commercial banking, extension of credit, investment services and investment banking. Morgan Stanley sells to and buys from customers the securities/instruments of companies covered in Morgan Stanley Research on a principal basis. Morgan Stanley may have a position in the debt of the Company or instruments discussed in this report. Morgan Stanley trades or may trade as principal in the debt securities (or in related derivatives) that are the subject of the debt research report.

Certain disclosures listed above are also for compliance with applicable regulations in non-US jurisdictions.

STOCK RATINGS

Morgan Stanley uses a relative rating system using terms such as Overweight, Equal-weight, Not-Rated or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Research. In addition, since Morgan Stanley Research contains more complete information concerning the analyst's views, investors should carefully read Morgan Stanley Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Disclosure Section (Cont.)

Global Stock Ratings Distribution

(as of January 31, 2021)

The Stock Ratings described below apply to Morgan Stanley's Fundamental Equity Research and do not apply to Debt Research produced by the Firm.

For disclosure purposes only (in accordance with FINRA requirements), we include the category headings of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, Not-Rated and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and Not-Rated to hold and Underweight to sell recommendations, respectively.

Stock Rating Category	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1477	43%	387	47%	26%	658	43%
Equal-weight/Hold	1435	42%	348	42%	24%	642	42%
Not-Rated/Hold	4	0%	1	0%	25%	4	0%
Underweight/Sell	532	15%	87	11%	16%	227	15%
Total	3,448		823			1531	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

Analyst Stock Ratings

Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

Disclosure Section (Cont.)

Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Important Disclosures for Morgan Stanley Smith Barney LLC & E*TRADE Securities LLC Customers

Important disclosures regarding the relationship between the companies that are the subject of Morgan Stanley Research and Morgan Stanley Smith Barney LLC or Morgan Stanley or any of their affiliates, are available on the Morgan Stanley Wealth Management disclosure website at www.morganstanley.com/online/researchdisclosures. For Morgan Stanley specific disclosures, you may refer to www.morganstanley.com/researchdisclosures.

Each Morgan Stanley research report is reviewed and approved on behalf of Morgan Stanley Smith Barney LLC and E*TRADE Securities LLC. This review and approval is conducted by the same person who reviews the research report on behalf of Morgan Stanley. This could create a conflict of interest.

Other Important Disclosures

Morgan Stanley Research policy is to update research reports as and when the Research Analyst and Research Management deem appropriate, based on developments with the issuer, the sector, or the market that may have a material impact on the research views or opinions stated therein. In addition, certain Research publications are intended to be updated on a regular periodic basis (weekly/monthly/quarterly/annual) and will ordinarily be updated with that frequency, unless the Research Analyst and Research Management determine that a different publication schedule is appropriate based on current conditions.

Morgan Stanley is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Morgan Stanley produces an equity research product called a "Tactical Idea." Views contained in a "Tactical Idea" on a particular stock may be contrary to the recommendations or views expressed in research on the same stock. This may be the result of differing time horizons, methodologies, market events, or other factors. For all research available on a particular stock, please contact your sales representative or go to Matrix at <http://www.morganstanley.com/matrix>.

Morgan Stanley Research is provided to our clients through our proprietary research portal on Matrix and also distributed electronically by Morgan Stanley to clients. Certain, but not all, Morgan Stanley Research products are also made available to clients through third-party vendors or redistributed to clients through alternate electronic means as a convenience. For access to all available Morgan Stanley Research, please contact your sales representative or go to Matrix at <http://www.morganstanley.com/matrix>.

Any access and/or use of Morgan Stanley Research is subject to Morgan Stanley's Terms of Use (<http://www.morganstanley.com/terms.html>). By accessing and/or using Morgan Stanley Research, you are indicating that you have read and agree to be bound by our Terms of Use (<http://www.morganstanley.com/terms.html>). In addition you consent to Morgan Stanley processing your personal data and using cookies in accordance with our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html), including for the purposes of setting your preferences and to collect readership data so that we can deliver better and more personalized service and products to you. To find out more information about how Morgan Stanley processes personal data, how we use cookies and how to reject cookies see our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html).

If you do not agree to our Terms of Use and/or if you do not wish to provide your consent to Morgan Stanley processing your personal data or using cookies please do not access our research.

Morgan Stanley Research does not provide individually tailored investment advice. Morgan Stanley Research has been prepared without regard to the circumstances and objectives of those who receive it. Morgan Stanley recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of an investment or strategy will depend on an investor's circumstances and objectives. The

Disclosure Section (Cont.)

securities, instruments, or strategies discussed in Morgan Stanley Research may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them. Morgan Stanley Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The value of and income from your investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

The fixed income research analysts, strategists or economists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues (which include fixed income trading and capital markets profitability or revenues), client feedback and competitive factors. Fixed Income Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

The "Important Regulatory Disclosures on Subject Companies" section in Morgan Stanley Research lists all companies mentioned where Morgan Stanley owns 1% or more of a class of common equity securities of the companies. For all other companies mentioned in Morgan Stanley Research, Morgan Stanley may have an investment of less than 1% in securities/instruments or derivatives of securities/instruments of companies and may trade them in ways different from those discussed in Morgan Stanley Research. Employees of Morgan Stanley not involved in the preparation of Morgan Stanley Research may have investments in securities/instruments or derivatives of securities/instruments of companies mentioned and may trade them in ways different from those discussed in Morgan Stanley Research. Derivatives may be issued by Morgan Stanley or associated persons.

With the exception of information regarding Morgan Stanley, Morgan Stanley Research is based on public information. Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Research change apart from when we intend to discontinue equity research coverage of a subject company. Facts and views presented in Morgan Stanley Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

Morgan Stanley Research personnel may participate in company events such as site visits and are generally prohibited from accepting payment by the company of associated expenses unless pre-approved by authorized members of Research management.

Morgan Stanley may make investment decisions that are inconsistent with the recommendations or views in this report.

To our readers based in Taiwan or trading in Taiwan securities/instruments: Information on securities/instruments that trade in Taiwan is distributed by Morgan Stanley Taiwan Limited ("MSTL"). Such information is for your reference only. The reader should independently evaluate the investment risks and is solely responsible for their investment decisions. Morgan Stanley Research may not be distributed to the public media or quoted or used by the public media without the express written consent of Morgan Stanley. Any non-customer reader within the scope of Article 7-1 of the Taiwan Stock Exchange Recommendation Regulations accessing and/or receiving Morgan Stanley Research is not permitted to provide Morgan Stanley Research to any third party (including but not limited to related parties, affiliated companies and any other third parties) or engage in any activities regarding Morgan Stanley Research which may create or give the appearance of creating a conflict of interest. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation or a solicitation to trade in such securities/instruments. MSTL may not execute transactions for clients in these securities/instruments.

Morgan Stanley is not incorporated under PRC law and the research in relation to this report is conducted outside the PRC. Morgan Stanley Research does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. Neither this report nor any part of it is intended as, or shall constitute, provision of any consultancy or advisory service of securities investment as defined under PRC law. Such information is provided for your reference only.

Morgan Stanley Research is disseminated in Brazil by Morgan Stanley C.T.V.M. S.A. located at Av. Brigadeiro Faria Lima, 3600, 6th floor, São Paulo - SP, Brazil; and is regulated by the Comissão de Valores Mobiliários; in Mexico by Morgan Stanley México, Casa de Bolsa, S.A. de C.V. which is regulated by Comisión Nacional Bancaria y de Valores. Paseo de los Tamarindos 90, Torre 1, Col. Bosques de las Lomas Floor 29, 05120 Mexico City; in Japan by Morgan Stanley MUFG Securities Co., Ltd. and, for Commodities related research reports only, Morgan Stanley Capital Group Japan Co., Ltd; in Hong Kong by Morgan Stanley Asia Limited (which accepts responsibility for its contents) and by Morgan Stanley Asia International Limited, Hong Kong Branch; in Singapore by Morgan Stanley Asia (Singapore) Pte. (Registration

Disclosure Section (Cont.)

number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore (which accepts legal responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research) and by Morgan Stanley Asia International Limited, Singapore Branch (Registration number T11FC0207F); in Australia to "wholesale clients" within the meaning of the Australian Corporations Act by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents; in Australia to "wholesale clients" and "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents; in Korea by Morgan Stanley & Co International plc, Seoul Branch; in India by Morgan Stanley India Company Private Limited; in Indonesia by PT. Morgan Stanley Sekuritas Indonesia; in Canada by Morgan Stanley Canada Limited, which has approved of and takes responsibility for its contents in Canada; in Germany and the European Economic Area where required by Morgan Stanley Europe S.E., regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin); in Spain by Morgan Stanley, S.V., S.A., a Morgan Stanley group company, which is supervised by the Spanish Securities Markets Commission (CNMV) and states that Morgan Stanley Research has been written and distributed in accordance with the rules of conduct applicable to financial research as established under Spanish regulations; in the US by Morgan Stanley & Co. LLC, which accepts responsibility for its contents. Morgan Stanley & Co. International plc, authorized by the Prudential Regulatory Authority and regulated by the Financial Conduct Authority and the Prudential Regulatory Authority, disseminates in the UK research that it has prepared, and approves solely for the purposes of section 21 of the Financial Services and Markets Act 2000, research which has been prepared by any of its affiliates. RMB Morgan Stanley Proprietary Limited is a member of the JSE Limited and A2X (Pty) Ltd. RMB Morgan Stanley Proprietary Limited is a joint venture owned equally by Morgan Stanley International Holdings Inc. and RMB Investment Advisory (Proprietary) Limited, which is wholly owned by FirstRand Limited. The information in Morgan Stanley Research is being disseminated by Morgan Stanley Saudi Arabia, regulated by the Capital Market Authority in the Kingdom of Saudi Arabia, and is directed at Sophisticated investors only.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (DIFC Branch), regulated by the Dubai Financial Services Authority (the DFSA), and is directed at Professional Clients only, as defined by the DFSA. The financial products or financial services to which this research relates will only be made available to a customer who we are satisfied meets the regulatory criteria to be a Professional Client.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (QFC Branch), regulated by the Qatar Financial Centre Regulatory Authority (the QFCRA), and is directed at business customers and market counterparties only and is not intended for Retail Customers as defined by the QFCRA.

As required by the Capital Markets Board of Turkey, investment information, comments and recommendations stated here, are not within the scope of investment advisory activity. Investment advisory service is provided exclusively to persons based on their risk and income preferences by the authorized firms. Comments and recommendations stated here are general in nature. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations.

The trademarks and service marks contained in Morgan Stanley Research are the property of their respective owners. Third-party data providers make no warranties or representations relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages relating to such data. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P.

Morgan Stanley Research, or any portion thereof may not be reprinted, sold or redistributed without the written consent of Morgan Stanley.

Indicators and trackers referenced in Morgan Stanley Research may not be used as, or treated as, a benchmark under Regulation EU 2016/1011, or any other similar framework.

The Americas

1585 Broadway
New York, NY 10036-8293
United States
+1 212 761 4000

Europe

20 Bank Street, Canary Wharf
London E14 4AD
United Kingdom
+44 (0)20 7425 8000

Japan

1-9-7 Otemachi, Chiyoda-ku
Tokyo 100-8104
Japan
+81 (0) 3 6836 5000

Asia/Pacific

1 Austin Road West
Kowloon
Hong Kong
+852 2848 5200

Enterprise application development, reimagined

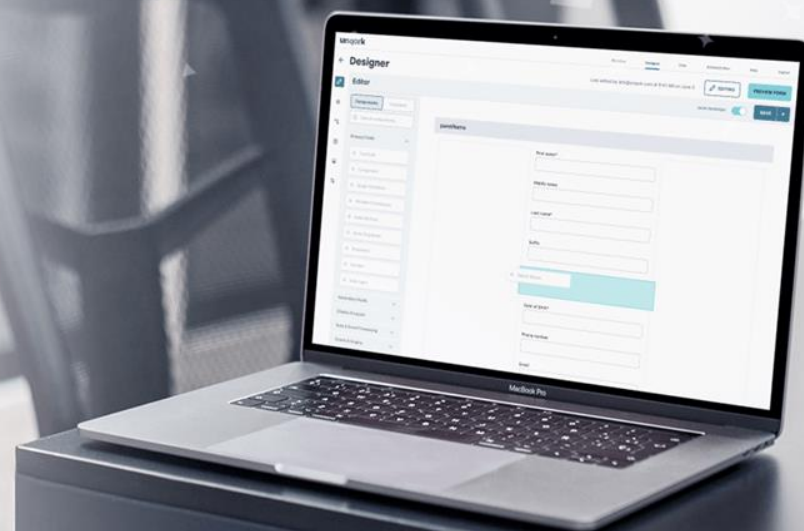
February 11, 2021

[Unqork Overview](#)



**Unqork is the first no-code
application platform built
for the enterprise**

**Build enterprise-grade software
on a single platform without
having to write a line of code.**



Unqork Overview



ABOUT

Founded in 2017, Unqork is the industry pioneer enterprise no-code application platform that helps large companies build, deploy, and manage complex applications without writing a single line of code.

Companies like Liberty Mutual, Goldman Sachs, and John Hancock are using Unqork's drag-and-drop interface to build enterprise applications faster, with higher quality, and lower costs than conventional approaches.



PRODUCT

Enterprise technology leaders have always been forced into a tradeoff. Simple applications can be built with “drag and drop” tools, but more functionality requires a variety of specialized tooling, expensive developers, and, most importantly, lots of custom code. The result is project failures, legacy maintenance, difficulty hiring, and, most importantly, too much time spent simply maintaining the status quo.

Unqork doesn't force you into this tradeoff. Combining a completely visual, no-code interface with the power of a truly enterprise-grade application platform, Unqork lets you build complex software without having to write a single line of code. The result is faster time to market, improved quality, and reduced cost that's just not possible with conventional tools.

Series C Funding Announcement October, 2020: <https://www.unqork.com/funding-announcement>

Unqork Tenets



Innovative

Unqork is a completely visual, no-code application platform that helps large enterprises build complex custom software faster, with higher quality, and lower costs than traditional approaches – all without a single line of code.



Accelerated Time to Market

Unqork has been shown to deliver software up to 80% faster than traditional approaches, so you can speed-up initial builds without sacrificing quality or loading up legacy expenses.



Collaborative

The completely visual interface opens development up to more stakeholders, so everyone can collaborate on requirements.



Reduced TCO

Large enterprises spend ~50% of their total budget on software, or over \$500b annually. With Unqork, changes can be made with far fewer resources; thus, substantially reducing TCO.



Trusted Security

Unqork maintains and monitors security, compliance, RBAC, and infrastructure all out of the box, allowing your teams to focus on other projects, providing peace of mind.

Who is Unqork?

ENTERPRISE GRADE APPLICATIONS

Unified No-Code platform for Complex, Regulated and Secure Environments

Engineered for the world's most complex, regulated environments and Industries

BACKED BY

\$400M+

capitalG Goldman Sachs BlackRock

ARCHITECTURE

Modern, Single Tenant, Multi-Cloud provided as turnkey SaaS



50+

Clients with **300+** Applications in productions

10+

Countries Deployed Across Americas, Europe, and Asia

10,000+

Trained Unqork **Designers** across **Customers & SIs**

BUSINESS IMPACT

Accelerate Speed to Market

From months to weeks

Significantly Low TCO

With up to 70% less resources

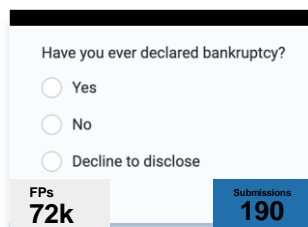
Business Agility

From rigid to on demand changes

The Unqork Platform Evolution

2021+

2017



Have you ever declared bankruptcy?

☐ Yes

☐ No

☐ Decline to disclose

FPS
72k


Submissions
190

No-Code Foundation

Launched in Insurance

Text Field, Radio Component, Checkbox, Dropdown, Number, Date Input, Password, Button, Email, Phone, Address, Hidden Field, Signature, HTML Element, Content Field, Data Grid, Matrix, Columns, Panel, Table

2018



FPS
404k

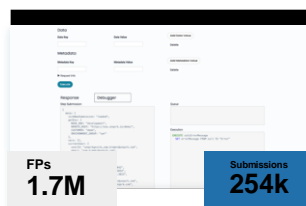
Submissions
14.2k

Becoming Enterprise-Grade

Launched in Banking, earned SOC 2, 1st SSO

Advanced Datagrid, Navigation Wizard, View Grid, Rich Text Editor, Repeater, File Upload, License Scanner, DataMapper, Decisions, Initializer, Plug-In, Calculator, Data Table, Checkpoint, Data Workflow, Timer, KPI, Maps, Gauges, Charts.

2019



FPS
1.7M

Submissions
254k

Evolved to App Building

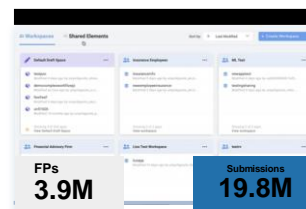
Launched in WAM, Capital Markets, and Public Sector

Partnered with AWS, Azure, GCP

1st WORM App with Goldman Sachs

Workflow, Server Side Execution, DocuSign Integration.

2020



FPS
3.9M

Submissions
19.8M

Multi-App Building

Launched in Healthcare, HIP(AA) App with MMC

Workspaces, File Storage, Gateways, Messaging, Signals, Designer RBAC, Dynamic Import, Module History, Release Management, Data Model, Global Variables.

Partnerships with DUCO, Codat, Plaid, Calendly, LexisNexis, Twilio, Ocrolus, SignNow, HumanAPI, Lyft, Yapily, Eigen, Flybits, ForMotiv, Finxact, Experian, Stripe, Apostrophe, Datadog, Atidot.



No-Code Ecosystem

Announcing the Unqork Marketplace

Enabling users to distribute and consume enterprise no-code products in the Unqork ecosystem.

Featured

- Twilio** - Cloud communications platform
- Hypergraph** - Data integration
- Plaid** - Financial data API

Recommended For You

- Hyperconnect** - Digital marketing
- MicroLink** - Data integration
- Transmute** - Data integration
- Codat** - Data integration
- Google Maps** - Maps API
- LexisNexis** - Legal research
- Stripe** - Payments
- API Specifications** - API management
- DocuSign** - E-signature

Unqork is Enterprise Application Development, Reimagined



Unified

Everything needed on a single platform: front-end, workflow, analytics, integrations, legacy transformations, management and maintenance



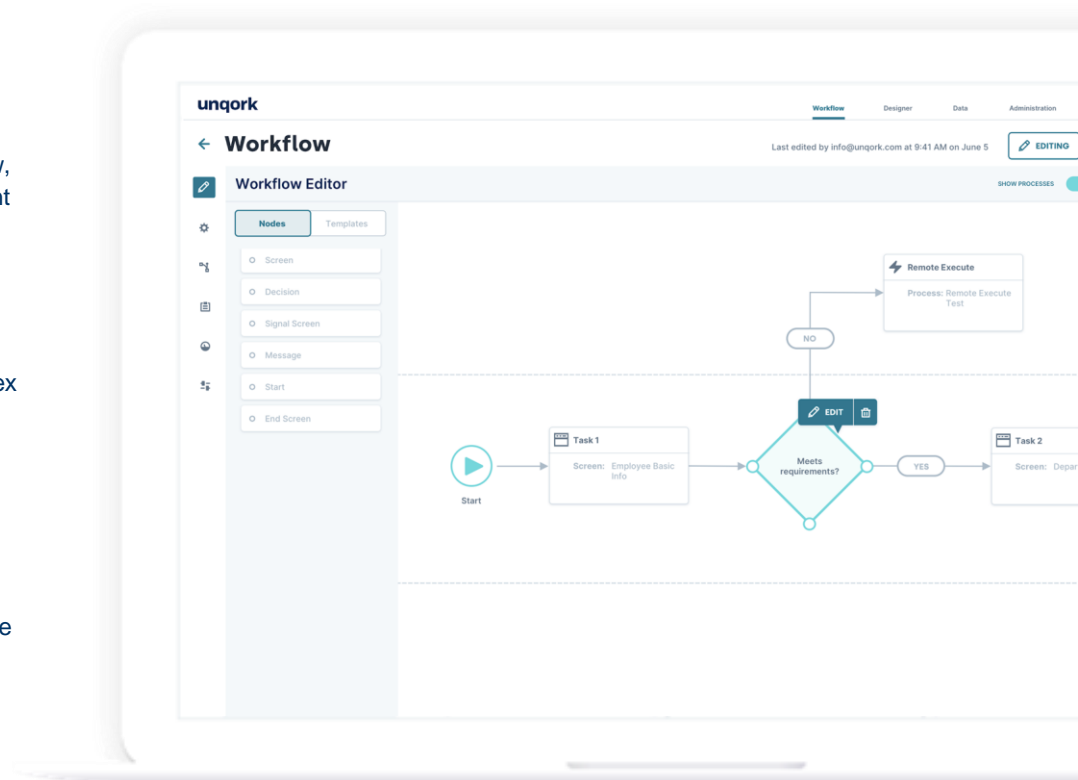
Visual

Complete drag and drop interface for even the most complex operations; spreadsheet-like calculations, visual data transformations; no code ANYWHERE on platform



Enterprise-grade

Single-tenant, cloud agnostic architecture; security, roles, and permissions that meet enterprise standards; Soc 2 Type II, Privacy Shield compliant

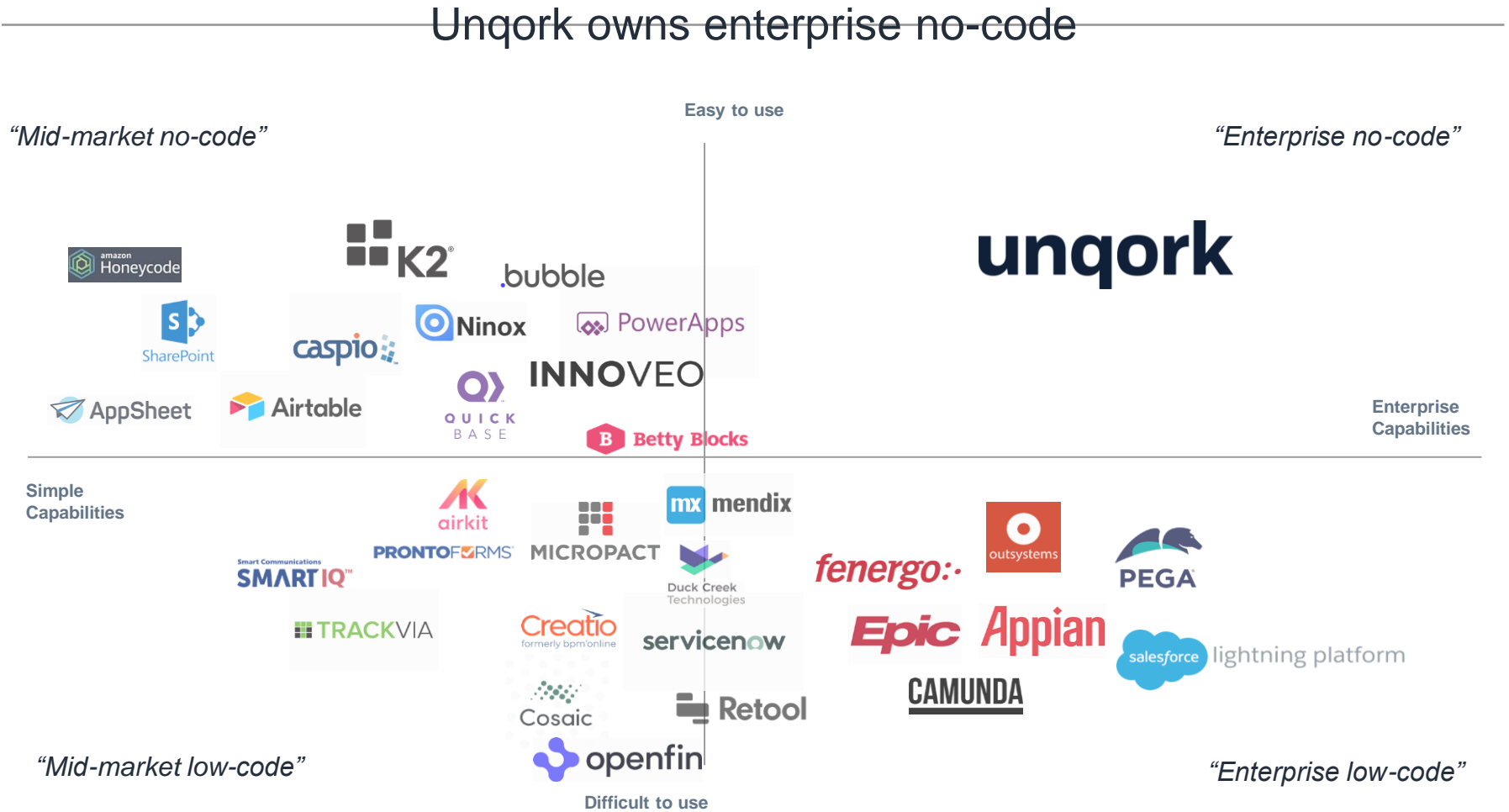


The Unqork Platform is providing huge impact for enterprise

	<u>From</u>		<u>To</u>
Faster time to market	6-18 months	→	8-12 weeks
Improved quality	Requirements hardcoded	→	Completely visual
Lower TCO	Difficult to change, legacy	→	Immediate, no legacy
Easier hiring	Only engineers	→	Engineers, analysts, IT generalists
Focus on innovation	Best engineers = mundane	→	Best engineers = toughest problems

Our clients include some of the world's most complex enterprises





Unqork delivers complex global applications across use cases



Insurance

Life

- Life Origination
- Accelerated Underwriting
- Policy Administration
- Claims Administration

P&C

- Digital Rate, Quote, Bind
- Digital Distribution
- Placement Marketplace
- Client Onboarding
- Placement Marketplace

Group Retirement

- Sponsor Onboarding
- Producer Onboarding
- Billing and Fee Mgmt



Financial Services

Banking

- Customer Digital Portal
- Customer Onboarding
- Loan Origination
- Deposit & Treasury Mgmt
- Operations Control

Wealth & Asset Management

- Solutions Marketplace
- Onboarding & Account Opening
- Account Servicing
- Sponsor Onboarding

Capital Markets

- Client Onboarding
- Risk Management
- Exception Hub



Public Sector

- Economic Development
- Health & Human Services (Referrals & Case Management)
- Inspections (Construction & Apartment)
- Housing Project Mgmt
- Food & Supply Delivery
- Virtual Public Services
- Online Marriage Licensing
- Emergency Management
- Law Enforcement
- HR Promotions, Onboarding & Reviews
- Funeral Director
- Return to Work
- Rent Relief
- Vaccination Platform



Healthcare

Payers

- Member Onboarding
- Provider Search & Scheduling
- Member Grievances & Appeals
- Case Management
- Real-time Claims Adjudication
- Provider Lifecycle Mgmt

Providers

- Digital Front Door
- Clinical Decision Support
- Telemedicine / Remote Patient Monitoring
- Claims Mgmt
- Patient Registration

Life Sciences

- Advanced Trial Monitoring
- Study Startup & Site Onboarding
- Patient Services Hub
- Regulatory Operations

Q&A