REFINITIV STREETEVENTS

EDITED TRANSCRIPT

RELY.OQ - Q4 2022 Remitly Global Inc Earnings Call

EVENT DATE/TIME: FEBRUARY 22, 2023 / 10:00PM GMT

CORPORATE PARTICIPANTS

Hemanth Munipalli *Remitly Global, Inc. - CFO*

Matthew B. Oppenheimer *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Stephen M. Shulstein *Remitly Global, Inc. - VP of IR*

CONFERENCE CALL PARTICIPANTS

Alexander Wexler Markgraff *KeyBanc Capital Markets Inc., Research Division - Associate*

Allison Sara Gelman *Barclays Bank PLC, Research Division - Research Analyst*

Andrew Garth Schmidt *Citigroup Inc., Research Division - VP & Analyst*

Darrin David Peller *Wolfe Research, LLC - MD & Senior Analyst*

David Michael Scharf *JMP Securities LLC, Research Division - MD & Equity Research Analyst*

Robert Paul Napoli *William Blair & Company L.L.C., Research Division - Partner and Co-Group Head of Financial Services & Technology*

Tien-Tsin Huang *JPMorgan Chase & Co, Research Division - Senior Analyst*

PRESENTATION

Operator

Good day, and thank you for standing by. Welcome to the Remitly Fourth Quarter 2022 Earnings Conference Call. (Operator Instructions) Please be advised that today's conference is being recorded.

I would now like to hand the conference over to your speaker today, Stephen Shulstein, Vice President, Investor Relations. Please go ahead.

Stephen M. Shulstein - *Remitly Global, Inc. - VP of IR*

Thank you. Good afternoon, and thank you for joining us for Remitly Fourth Quarter 2022 Earnings Call. Joining me on the call today are Matt Oppenheimer, Co-Founder and Chief Executive Officer of Remitly; and Hemanth Munipalli, our Chief Financial Officer. Our results and additional management commentary are available in our earnings release and presentation slides, which can be found at ir.bermitlead.com. Please note that this call will be simultaneously webcast on the Investor Relations website.

Before we start, I would like to remind you that we will be making forward-looking statements within the meaning of the federal securities laws, including, but not limited to, statements regarding Remitly's future financial results and management's expectations and plans. These statements are neither promises nor guarantees and involve risks and uncertainties that may cause actual results to vary materially from those presented here. You should not place any undue reliance on any forward-looking statements. Please refer to our earnings release and SEC filings for more information regarding the risk factors that may affect our results. Any forward-looking statements made in this conference call, including responses to your questions, are based on current expectations as of today, and Remitly assumes no obligation to update or revise them, whether as a result of new developments or otherwise, except as required by law.

The following presentation contains non-GAAP financial measures. For reconciliations of each of these non-GAAP financial measures to the most directly comparable GAAP metrics, please see our earnings release, which is available on the IR section of our website.

Now I will turn the call over to Matt to begin.

REFINITIV

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Thank you, Stephen, and thank you all for joining us to discuss our strong fourth quarter results and our outlook for 2023. This past year was a momentous year for Remitly and we made significant progress on our long-term vision with benefits for both our customers and shareholders. We are grateful to be in a business that matters so deeply to our customers. They depend on us every day to get money home to family and friends safely and quickly.

On Slide 4, you can see why I am so confident about Remitly's future. First, our customers are resilient and predictable over many years of sending. This matters even more in volatile times and gives me comfort that we will be able to deliver strong growth across economic cycles. Second, our investments to provide a world-class remittance experience for our customers have resulted in a premium product that customers loyally use and keeps getting better as we scale. Third, we're proud of our track record of execution as we have consistently exceeded expectations since our IPO. Finally, as a result of the foundational investments we have made, solid execution and the continued strength in customer behavior, we have been able to increase the returns on our investments. As a result, we expect to be adjusted EBITDA positive in 2023.

We believe we can continue to deliver strong revenue growth with high return investments over many years while efficiently scaling the business to deliver increased efficiencies. Turning to our exceptionally strong results for the fourth quarter. Revenue increased by 41% to $191 million. Our top line results efficiencies across many areas of our cost structure and favorable market dynamics resulted in a strong adjusted EBITDA performance of $7.5 million in the quarter. We believe the results in the fourth quarter display our strong product, loyal customer base and an intentional approach to delivering high returns on our investments.

Turning to the drivers of our fourth quarter quarterly active customer growth of 48% on Slide 5. We continue to take share and are growing customers significantly faster than the overall remittance market, whether that's traditional brick-and-mortar or digital. We set another company record for new customer acquisition during the fourth quarter as we benefited from our increasingly effective marketing and scale, especially in markets outside North America. We also benefited early in the fourth quarter as developed market currencies were strong compared to emerging market currencies. Our focus later in the fourth quarter was to pick up increased demand during the holidays, especially for corridors that see seasonal spending spikes for Christmas, a goal that we successfully executed. Our business outside North America also delivered a record number of new customers as we continue to focus on providing localized marketing experiences contributing to a strong holiday demand capture.

Finally, our product improvement leading the customer peace of mind also made it easier to attract and retain customers. Our retention remains strong at an average of 90% of revenue retained after the first full year of growth, and our recent cohorts continue to show similar retention trends as we focus on acquiring high-quality customers who continue to transact with us over many years. This retention is the result of our premium product and our commitment to investing in reducing customer friction along with pricing that delivers long-term value for our customers. High retention is also driven by the resilience of our customers and the reasons why they use our product.

Our customers typically send money home to their family and friends multiple times a quarter to help with basic nondiscretionary living expenses. This support to their families back home takes on even more important, especially during times of economic uncertainty, which we have seen across the developing world even more than in developed countries. Finally, we survey our customers every quarter and the results remain consistent. The vast majority of customers expect to send money at the same frequency or more often than they did in the past year. This gives us additional comfort around the visibility and predictability of our customer behavior in 2023.

We continue to invest in our strategic priorities, as shown on Slide 6. Our investments in these 4 priorities will allow us to deliver efficient new customer growth and drive additional retention and customer loyalty in both the near and long term. Our focus on new customer acquisition at highly attractive unit economics and growing our geographic footprint will help us drive efficient customer growth. Enhancing our remittance product and our vision of serving our customers with complementary new products will allow us to drive even higher retention and customer engagement. As we continue to invest across these 4 areas, we are maintaining our disciplined focus to ensure our investments have even higher long-term returns, consistent with our history of making investments at very strong unit economics.

As the cost of capital has increased, we have increased our hurdle rates around these investment priorities in 2022 and also increased focus on scale efficiencies, which had the benefit of allowing us to accelerate our path to adjusted EBITDA profitability to the full year 2023, while at the same time, ensuring we're able to generate sustainable high returns for many years to come. We are well positioned to reap the benefits of increasing returns from our new customer acquisition, geographic expansion, remittance product enhancements and complementary new products in 2023 and beyond.

Turning to Slide 7. Our efficient new customer acquisition has been driven by increasing brand awareness, our highly localized approach across 170 countries and increasing scale, which drives low-cost word-of-mouth customer acquisition. One of our strengths is deploying and measuring the impact of our marketing investments at a quantitative, detailed and actionable level. Specifically, we focus on the elasticity of our marketing investments and making sure our paid marketing spend is bringing the right level of return in a short-term time horizon. Alongside that, we have continued to invest in unpaid channels and awareness building efforts, making sure we are building medium- and longer-term demand, which, in turn, drives even more efficiency into our marketing program as our brand awareness increases.

This combination of increased rigor in how we deploy marketing dollars combined with a scalable and highly localized approach and a continued multiyear investment into the upper funnel has resulted in the cash efficiencies that we have delivered. While CAC is a key driver for marketing efficiencies, it is important to note we look at CAC in the context of LTV-to-CAC. Our customer lifetime value remains incredibly strong, driven by high retention, customer resilience or premium product, durability and pricing and continued leverage in transaction expense. Even as our business has grown substantially and geographically, our LTV to CAC for our 2022 cohort is similar to the 6x we shared during the IPO.

Our second investment priority is expanding our geographic footprint, which includes opening up new corridors as well as expanding our disbursement options. As you can see on Slide 8, we continue to add new send markets including New Zealand in the fourth quarter and the United Emirates market last month. The UAE is the second largest source market for remittances after the U.S., with significant receive corridors that we already serve well, including India, Pakistan, Philippines and Bangladesh.

The UAE currently has a large percentage of remittance transactions done via cash pay in and is right for digital disruption. We believe we can compete very effectively in this market, and we are very proud to now be able to support the more than 8 million immigrants in the UAE, many of whom send money home to their love land and are looking for more convenient options and a better experience that we believe we can deliver.

Looking ahead, we have the opportunity to further expand into additional markets, including in the Middle East and Europe, helped by the Rewire acquisition, which we closed last month. Additionally, we continue to believe the quality of our disbursement options, including 4 billion bank accounts, 435,000 cash pickup locations and 1.1 billion mobile wallet remain one of the many compelling value propositions for our customers.

Our geographic expansion has allowed us to further grow and diversify our revenue as can be seen on Slide 9. While all regions have had a greater than 50% revenue CAGR since 2020, we have seen our business outside North America grow even faster and achieve a scale of more than $100 million in revenue in 2022. Our business outside of North America now represents 15% of total revenue, which is up over 400 basis points compared with 2020. In addition, our 3 largest receive markets by revenue, Mexico, India and the Philippines represented approximately 65% of total revenue in 2022, which is down from approximately 75% in 2020. Our growth and scale outside North America is critical for many reasons, including lessening our risk exposure to region-specific macroeconomic issues, diversifying our foreign exchange exposure and lowering our CAC outside North America as we gain relevant scale and brand presence.

Our third priority is to deliver a premium customer experience as we scale by continuing to invest in the remittance product. Customers are offered peace of mind from the moment they open our app until funds are safely delivered in the hands of their family and friends around the world as you can see on Slide 10.

From ensuring our customers have the widest selection of payment options, delivering a frictionless experience while minimizing exposure to risk, enabling the ability to track funds anytime, accessing self-help and live customer support to operate one of the fastest, most reliable and extensive disbursement networks in the industry, we are reinventing the remittance experience and building a premium product that our loyal customers love and trust.

Accordingly, once we have received customer funds, more than 90% of transactions are dispersed in less than 1 hour. Additionally, we are able to maintain an uptime of 99.94% even as our volumes continue to show significant growth. All of this leads to high retention of existing customers and helps us build a premium experience and a trusted brand in the communities we serve.

The last point I'd like to note regarding remittance product enhancement investments is our fraud prevention systems continue to be a strategic advantage to both our business model and customer experience. Fraud loss is always a balancing act between delivering a frictionless customer experience and an acceptable fraud loss rate. In Q4, both the customer experience and fraud loss rates were strong. These updates were the result of improvements we made to our fraud machine learning models, which, with the addition of scale and sophistication gives us better data and better tools to train our models to more effectively identify bad actors. This will ultimately enable us to improve the customer experience while also improving our fraud loss rate. We believe our internally developed fraud capabilities are a long-term strategic advantage, even though a certain segment of fraud loss remains variable from quarter-to-quarter as we seek to maximize our customer experience and fraud loss rates.

Finally, turning to our long-term vision of complementary new products on Slide 11. Our strategy has narrowed to focus on solving customer problems that are complementary to the international payment needs we are already serving. We believe this focus will drive valuable outcomes for customers, deepen customer loyalty and retention and further improve efficiency with new customer acquisition. Ultimately, we expect that our focused product strategy will deepen and expand our remittance relationship with our customers, creating a virtuous cycle and competitive advantage for Remitly that will be hard to replicate.

As a result of this strategic evolution, we have made the decision to sunset our Passbook brand. While Passbook was gaining traction with customers and was growing, it was ultimately outside our core customer segment. We believe it makes sense to redeploy our resources to higher returning investments targeted at our core remittance customer. We are taking the best of learnings from Passbook and integrating them into products or features to deliver greater value through innovative solutions that are directly relevant to our customers' remittance needs and that we are uniquely equipped to deliver.

Before I turn the call over to Hemanth, I'd like to reiterate our strategic priorities for 2023 on Slide 12, which are all about continuing to deliver on our promises to our customers and shareholders over the long term. This is all supported by building a world-class culture rooted in serving our customers. Our focus on long-term sustainable returns remains a common thread across all of these priorities. Turning to specifics on these priorities. First, new customer acquisition. We will plan to remain disciplined on marketing expenses and believe we will be able to continue to show leverage with some variability over time depending on competition in the ad market with unit economics guiding our investment decisions.

Second, geographic expansion. There remains a significant amount of new market opportunities and opportunities in existing markets as we still only represent approximately 2% of total remittance volume. Our scale and prior investments will allow us to enter new markets even more efficiently and effectively. Third, we will strive to deliver customer peace of mind with a flawless remittance experience, which drives customer loyalty and improve margins. And finally, fourth, with our complementary new products, we will solve problems unique to our remittance customers, driving additional engagement and loyalty.

I am very confident in our ability to deliver on our promises to customers and shareholders, and we remain anchored on our vision on Slide 13 to transform the lives of immigrants and their families by providing the most trusted financial services on the planet. I believe we have the best team in the industry to execute on this vision and look forward to what we can accomplish together for all of our stakeholders.

With that, I'll turn the call over to Hemanth to provide more details on our financial results and 2023 outlook.

Hemanth Munipalli - *Remitly Global, Inc. - CFO*

Thank you, Matt. I'm very pleased with our exceptional financial performance for the fourth quarter. Our teams had strong execution in the quarter, and we also benefited from some favorable market conditions and both of these factors led to our outperformance in the quarter. I'll begin by reviewing some high-level drivers of our financial performance. I will then discuss the priorities we're focusing on to ensure we can deliver sustainable growth and high returns for many years to come. I'll finish with our outlook for 2023 and our investment priorities. With that, let's turn to our fourth quarter results. As a reminder, I will discuss non-GAAP operating expenses and adjusted EBITDA in my remarks. These metrics exclude items such as stock-based compensation, the donation of common stock in connection with our pledge 1% commitment, transaction costs related to acquisitions and foreign exchange gain a loss. Reconciliations to GAAP results are included in the earnings release.

Beginning on Slide 15 with our high-level financial performance in the fourth quarter. We're pleased to deliver high active customer and revenue growth and adjusted EBITDA profitability. Quarterly active customers grew by 48% year-over-year to $4.2 million. Send volume grew 35% year-over-year to approximately $8.1 billion, only resulting in revenue growth of 41% year-over-year to $191 million. On a constant currency basis, both send volume and revenue growth rates would have been approximately 500 basis points higher on a year-over-year basis. This revenue outperformance combined with significantly lower transaction expense and marketing efficiency led to adjusted EBITDA of $7.5 million in the quarter. Our GAAP net loss was $19 million in the quarter and included $27 million of stock compensation expense recognized in the quarter.

Now let's turn to some of the key factors that drove the exceptional performance in the fourth quarter. On Slide 16, we detail both our execution wins and some macro factors that led to our strong results in the quarter. Let's begin with revenue, which was up 41% year-over-year in the fourth quarter and approximately up 46% year-over-year on a constant currency basis. Our strong revenue growth was driven by high retention of existing customers and benefits from earlier international expansions. Existing customer activity contributed to a significant portion of total revenue in the fourth quarter, which reflects the consistent spending behavior of our customers and our premium customer experience.

In Q4, we also acquired a significant number of new customers who we expect to more meaningfully contribute to revenue in future quarters. In addition, certain macro factors such as some strong developed market currencies had a positive impact on our revenue in the quarter as this provided an incentive for some of our customers to send remedies. While our customers are typically sending money home for basic needs, there are some markets that are more sensitive to foreign exchange rate changes, especially those that tend to also have larger transaction sizes. In addition, we also benefited from lower advertising costs as strong developed market currencies tend to encourage certain prospective customers to search for remittance options to take advantage of favorable foreign exchange rates.

Turning to our transaction expenses, which includes costs relating to our paid partners, disbursement partners and fraud losses. Transaction expense as a percentage of revenue was down 410 basis points year-over-year. This was primarily due to significantly lower fraud loss rates in the fourth quarter as a result of improved algorithms, which harness our increasing amount of data and analytical sophistication. This helped drive substantial improvements in fraud loss rates on a year-over-year basis. We're excited about the improvements in fraud launch rates in Q4, and we'll continue to invest in our data and analytics capabilities to manage both our fraud loss rates and provide our customers with frictionless experiences. However, we expect some variability in fraud loss rates in the end quarter while making sustainable improvements in the long term.

A key driver of our strong results in the fourth quarter was the efficiencies we delivered in our new customer acquisition marketing as we made a deliberate effort to drive even more higher returns on our marketing spending while still acquiring a record number of new customers. As customer acquisition costs or CAC makes up the vast majority of marketing expense, we were able to deliver a 600 basis point year-over-year decline in our overall marketing expense as a percentage of revenue. We were able to significantly drive down fourth quarter CAC 35% year-over-year and 6% sequentially. A number of factors drove declines in CAC, including increased benefits from localized digital marketing, brand awareness, word of mouth effect and increasing scale in our business outside North America. This has allowed us to bring down our Rest of the World Cup closer to our North American CAC levels. We also believe the strength of certain developed market currencies attracted some customers requiring less marketing effort.

In Q4, we also observed increased competition in the advertising market as it is a seasonally high period for remittance activity. However, it was still weaker than expected both year-over-year and on a sequential basis. We were pleased to be able to take advantage of this environment in the fourth quarter. Overall, we are very pleased with the significant gains we have made in CAC efficiency through 2022, but with a relatively low market share in the global remittance market, we expect to remain dynamic in managing CAC within our investment thresholds to ensure that we continue to aggressively grow our customer base. We will continue to monitor the advertising market trends during 2023 with the expectation that 2023 will have a more normalized competitive environment. We're also focused on delivering additional scale efficiencies, while at the same time, investing in our growth opportunities.

In the fourth quarter, G&A expense declined 150 basis points year-over-year as we anniversaried the increase in public company expenses and we maintained disciplined and focused on the highest returning investments that would allow us to scale effectively for many years to come. Technology and development expenses increased 270 basis points year-over-year and reflects the investments we're making in our remittance platform and developing complementary new products. We expect to continue to invest in delivering a premium experience and are being opportunistic about hiring high-quality talent given the dislocations seen recently in the tech hiring market. Customer support and operations expenses were essentially flat year-over-year as a percentage of revenue. We expect to see improved efficiencies and customer support over time as we continue to scale and meet the benefits from product investments and automation.

Our focus for 2023 and beyond is on 4 key areas to drive sustainable long-term returns, as you can see on Slide 17. These are to continue to deliver strong revenue growth, improved transaction expense, sustain or improve marketing efficiency and increased scale efficiencies in other operating expenses. By focusing on executing across these 4 areas, particularly with the additional focus on efficiencies, we believe we can deliver sustainable long-term high returns.

First, we expect to consistently deliver high double-digit revenue growth even as we scale. This will be driven by robust growth in active customers, high retention and pricing that delivers value for our customers. Active customers are driven by customer loyalty, highly effective marketing and a premium experience, enabling us to continue our market share gains. In the fourth quarter, these factors helped deliver 41% year-over-year revenue growth.

Second, we see opportunities to continue to improve our transaction expense cost structure as we increase our volume of remittance transactions. We expect our transaction expense leverage will be driven in the medium to long term, but reduced costs relating to partner integrations, better terms with payment processing and disbursement partners and improvement to risk and fraud management systems, especially as we increase the volume of customer data that we integrate into our fraud models and algorithms. These drive down fraud loss rates, while at the same time, improving the customer experience. We expect some variability in transaction expenses from quarter-to-quarter as some fraud costs remain inherently unpredictable.

Turning to marketing efficiency. Marketing expenses are our largest operating expense and the vast majority of marketing expenses related to new customer acquisition efforts. We plan to continue investing in high-return marketing with a focus on customer growth and sustaining our CAC efficiency gains. As we grow, we're also looking closely at our operating expenses, while at the same time ensuring we're making the appropriate investments that allow us to deliver on our strategic priorities for the long term. Our year-over-year growth in G&A expense has moderated as we begin to anniversary the ramp in public company expense, and we expect to continue to be disciplined on both headcount and non-headcount expenses. Our technology and development expense reflects the investments we're making to deliver a world-class limiters experience for our customers and to position us to deliver complementary new products and engineering efficiencies to investments in our platform.

We expect to continue prioritizing these investments as they are crucial to attracting and retaining customers. Our customers to post cards are influenced by the level of new customer adds in the quarter as new customers tend to have higher initial support contacts. We're focused on automating key customer support features so customers have more self-help options with the goal of reducing both the contact rate and the cost of servicing these contacts over time. By focusing and executing on these 4 areas, we believe we are positioned Remitly to deliver both strong top line revenue growth and increasing returns on our investments for the foreseeable future.

Looking ahead to our outlook for 2023, on Slide 18, we expect to be able to deliver strong revenue growth along with profitability on an adjusted EBITDA basis for the full year. Specifically, we expect revenue to be between $860 million and $880 million, which reflects a year-over-year growth rate of 32% to 35%. And -- we expect adjusted EBITDA to be between breakeven and $10 million. We're excited to be able to accelerate adjusted EBITDA profitability to 2023 on the back of a strong fourth quarter as we continue to prioritize growth, but increase our focus on efficiencies while continuing to make investments that we expect to deliver high returns for the long term.

Our 2023 outlook reflects the following assumptions. We're planning for a macro and FX environment that remains relatively stable to what we've seen in the fourth quarter of 2022. We also believe that strong developed market currencies in 2022 had a partial beneficial impact on our customers sending behavior for some corridors and enables some new customer acquisition.

From a planning perspective, we assume that customers sending behavior returns to a more normalized pattern in 2023.However, this is highly dependent on how currencies move in 2023 and our continued global diversification will help mitigate some of this impact as well as other localized macroeconomic trends.

We expect to continue to see modest leverage on transaction expense as we expect to benefit from improving terms with both day and dispersal partners given the increasing volumes flowing to our network.

On fraud costs, we expect to continue to benefit from advanced technologies data and algorithms to reduce fraud while continuing to improve our customers' experience. However, certain fraud costs are inherently unpredictable in any quarter, and we believe we are being prudent in our assumptions.

In 2023, we expect to sustain CAC efficiencies we were able to achieve last year as our CAC is also partially impacted by the competitive environment for the advertising market. For planning purposes, we have assumed the benefit from an improving competitive ad market will be more modest in 2023 versus what we experienced in 2022. We also plan to maintain our ability to invest even more in new customer acquisitions if the unit economics become even more compelling. We expect to continue to broadly see leverage on our operating expenses as we scale globally and focus on higher return on investments by continuing to invest in our technology and development as we prioritize improving our remittance experience to our resilient customers in building complementary new products. We also expect the normal seasonality of remittance activity will apply through 2023 with the first quarter revenue being the lowest and fourth quarter revenue being seasonally the highest. This was the same seasonal pattern last year.

We're pleased to be able to accelerate our path to adjusted EBITDA profitability in 2023, while maintaining very strong top line growth at our scale. This, along with our strong balance sheet, as seen on Slide 19, positions us to keep investing in our strategic priorities to deliver for both our customers and shareholders for many years to come. We ended the year with approximately $300 million of cash and cash equivalents on our balance sheet and 0 debt, which provides us with substantial liquidity to execute on our strategic priorities. Our primary focus for capital allocation remains our organic growth priorities of new customer acquisitions, geographic expansion, remittance product enhancements and complementary new products. We are executing strongly with a resilient and loyal customer base, and I'm excited about our opportunities to continue delivering strong results for our customers and shareholders in 2023 and beyond.

With that, Matt and I will open up the call for your questions. Operator?

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) Our first question comes from Andrew Schmidt with Citi.

Andrew Garth Schmidt - *Citigroup Inc., Research Division - VP & Analyst*

Matt, Hemanth, Stephen, great results here. I want to start off just with a longer-term question. Good job sort of outlining the marketing efficiencies and narrowing of focus and the other OpEx efficiencies. I'm just curious, with the work that you've done so far, is it possible to provide a framework for intermediate to longer-term margin structure. Just curious because clearly, a lot of the work has been done in terms of getting a profitability. Just curious if there's a framework for the longer-term view.

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Yes. Thanks, Andrew. I think we've had a really strong Q4 performance and also really pleased that in 2023, we were able to pull forward and accelerate our adjusted EBITDA profitability. To your question in terms of the long term, I think we're still in the process of really looking at what our ultimate margin profile would look like for the company. But given our guidance of getting to $60 million to $8 million range in terms of our revenues and profitability in the range of breakeven to $10 million, we think it sets us in the right place to continue on a trajectory of increasing margins over time.

We talked about our transaction expenses, there's opportunities in terms of improving our transaction expense profile and the margin that comes out of that. CAC continues to be efficient, although like we said, there is a little bit of an industry impact there when you think about the advertising market. When you looked at Q4, we expected the market to be hotter. It wasn't as competitive as we thought it would be. So the reason I called that out is we have a small market share in a large derivatives industry, and we will continue to invest in things like marketing to drive our top line growth and drive active users. So I think given all of those factors and given the long runway we have in terms of gaining market share, at this point, we're not really offering up any sort of longer-term guidance in terms of margin, but we feel that given 2023 and what we have put out there, it will set us on the right path going forward.

Andrew Garth Schmidt - *Citigroup Inc., Research Division - VP & Analyst*

Very clear. And then maybe, Matt, I could touch on complementary products, obviously, important to longer-term ARPU and loyalty potential. But maybe just if you could just go a little bit deeper in terms of what narrowing-focus means and how we should think about a portfolio of complementary products for your customer over time, what that would look like specifically?

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Yes. Thanks, Andrew, and great to see it. I appreciate the question. So yes, as I mentioned, we're actually excited about how we're narrowing our focus to products that solve specifically problems for Remitly customers. So with Passbook, we saw that users were really loving and using the product, but we didn't see that the customer segment had a high overlap with our existing Remitly customers. So on a stand-alone basis, we saw strong growth with passbook users. The product wasn't going to achieve the scale necessary fast enough to contribute to meaningful returns because it was just a different segment from Remitly customers, so we didn't get that synergy.

So now that does get to your question, Andrew, with that context of what we mean by narrowing, we think it makes sense to deploy our resources to higher returning investments targeted at our core Remitly customer, where there are those synergies. So on a go-forward basis, we're continuing to see that immigrants have very specific needs and challenges regarding remittances and other ancillary services that aren't being met by traditional financial services products. And we're investing in our platform to meet those needs. And so complementary products you can view in that way will enhance our remittance business. It will give us unit economic strength in the long term. And it's something that obviously as we continue to invest in, we'll share more details in terms of the products that we're launching and building there once they're live and ready to talk with folks about but excited about the opportunity.

Operator

Our next question comes from Ramsey El-Assal with Barclays.

Allison Sara Gelman - *Barclays Bank PLC, Research Division - Research Analyst*

This is Allison on for Ramsey. Just wondering if you could elaborate just a bit further on the macro assumptions that are baked into your '23 guide. And though your customer is generally pretty resilient, what expense levers could you potentially pull to meet your guidance targets in the case of economic downturn or just less favorable market conditions?

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Yes. Thanks, Allison, for the question. In terms of sort of the macro, just broadly the assumption we're making here is that the macro environment and the FX environment will be broadly be stable to what we saw in Q4. I think as we all seen the first 9 months or so of last year, there was a pretty big strengthening of the U.S. dollar and some of the stronger currencies would start to stabilize a little bit more (inaudible) of the second part of Q4. So we're assuming a degree of stability around that environment as we've looked at our projections for this year.

In terms of your question around the expense was, first of all, I just want to reinforce again that we have a lot of resiliency in our customers, and we've been through multiple cycles where we've seen continued active customer activity growth even in cycles around sort of environments that are similar to what we're talking about now. And so we do think that there is a high degree of resiliency when it comes to our customers and the repeat behavior. On very specifically on the expense levels, we have definitely a lot of opportunity to cut back in areas that are nondiscretionary and some of the other places that we can go finer into our P&L and take action. So I think we have -- given our strong transaction margin profile, given the fact that we have a high degree of variability in our marketing spend, which is largely direct marketing towards new customer acquisition. We have multiple levers in our P&L to manage a significant downturn.

Operator

Our next question comes from Bob Napoli with William Blair.

Robert Paul Napoli - *William Blair & Company L.L.C., Research Division - Partner and Co-Group Head of Financial Services & Technology*

Nice results. Well done. Just any -- the geographic expansion, the number of new quarters you've added has been pretty dramatic. And I mean, you've been, I guess, underweight in the Middle East, and you've added some UAE. What are your thoughts on -- first of all, of the new markets you've added, which of those are standing out where you're getting more traction? And what are your thoughts around the ability to be that very important Middle Eastern market to have success there over the long term?

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Yes. Thanks, Bob. I appreciate both the comment and question. I'd say, yes, it pertains to a number of corridors, Yes, we're 4,300 corridors now, 170 countries. And we've done that in a very methodological way, both over the last several quarters and years and as we think about on a go-forward basis. And so the way that I would think about it is a continuation of that strategy. So the UAE, we just launched second largest outbound remittance market, as I mentioned, New Zealand we just launched. And I think those should be viewed as planting the seeds for returns in the quarters and years to come, just like a few quarters ago or a few years ago, we were talking about markets like Europe that were relatively new that we were launching and starting to add healthy cohorts of new customers. You can see those kind of stacked bar charts in terms of power business works. But we enter markets, we add healthy cohort of new customers at great unit economics.

And then just given the size of our business, that starts to compound and have a more meaningful impact in the quarters and years to come. And in terms of where I'm excited, yes, a lot of the countries we just launched regions that, as you mentioned, we're just starting to expand to, including the Middle East. I think there's a big opportunity for us to both grow a large business in those regions and make a really positive impact to our future customers' lives given that I think we can lead some of the digitization that's happening in some of the markets that we just recently launched. So more to come and excited about the foundation that we're continuing to set for future countries to contribute any flow to the business.

Robert Paul Napoli - *William Blair & Company L.L.C., Research Division - Partner and Co-Group Head of Financial Services & Technology*

There's been some -- I guess, some of your competitors that have been around a while have become a little more, I guess, using promotional pricing or -- and looking at your numbers, I don't see any slowdown in your business. So just some thoughts on the competitive environment. And I mean are you seeing any effect from some of the pricing moves that some of the competitors have made?

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Yes. Thanks, Bob. We're seeing -- incline is we're seeing price stability and no real changes in the competitive landscape and the slightly longer answer for why that's the case is I think customers choose Remitly for a multitude of reasons, and pricing is one of those factors. But the thing that I've learned time and time again over a decade of building this business is things like trust, peace of mind are foundational and very hard to deliver and that we are exceptionally good at and getting better and better with scale, which ties back to the premium product that I mentioned as well as the transaction numbers, the loyalties, the predictability and consistency of our business. So that's a long-winded answer, but the punchline again is price stability, no material changes in the competitive landscape.

Robert Paul Napoli - *William Blair & Company L.L.C., Research Division - Partner and Co-Group Head of Financial Services & Technology*

Nice to see the free cash flow positivity then move to free cash flow positive.

Operator

Our next question comes from Darrin Peller with Wolfe Research.

Darrin David Peller - *Wolfe Research, LLC - MD & Senior Analyst*

Yes. Looking at some of these metrics on Slide 16, which by the way, was very helpful. I mean when we look at the improvements we're seeing in transaction expense, obviously, the fraud management was really helpful. I mean can you give a little more color on what's actually driving that gross margin improvement and the sustainability of that because it was a big step big step function that obviously is going to help allow for flow-through to the bottom line, what you're seeing now.

And so and on that follow-up on that, on the profitability side, it's really great to see the breakeven to positive 10. Just can you give us a little bit more color on the dynamics of what you're building into that around G&A now, maybe also stock comp? And what contribution you're going to have there versus other expenses?

Hemanth Munipalli - *Remitly Global, Inc. - CFO*

Yes. Thanks, Darrin. So in terms of -- I mean, to your point, we're really pleased with the progress we made in Q4 in particular. I think it was accepted in many ways in terms of bringing down our fraud loss rate, although that really is the scale that we're continuing to build and the data that we're getting and ingesting into our fraud models and algorithms, we did launch some new algorithms in Q4 and we're continuing to test algorithms and we're seeing really positive signs around that. We saw that obviously in Q4, and we continue to remain optimistic in terms of what those models will do for us. But the point on fraud as well here, which Matt alluded to in his comments too, is that we're also looking to make sure we're minimizing any friction with our customers. So there is a balance there that we're cognizant of, and our models take that into account, but we're balancing, making sure we don't -- we introduced very little friction for our customers and at the same time, making sure our fraud loss rates continue to be at the levels that we saw in Q4. So that's with regard to fraud.

To your question around what's baked in into adjusted EBITDA I'll just begin with saying that we really anchored on our top line growth, and you can see we've guided here to a 30% to 35% revenue growth for the year, and that really drives a lot of what's happening in the P&L in terms of our ability to get to breakeven to $10 million of EBITDA for the year. On the expense side of things, we certainly are focused on moderating the growth of our expenses more broadly speaking. G&A, we talked about anniversarying our public company expenses, which will likely start moderating this year. But we continue, at the same time, make investments in our product and technology area, which we think are the right high return on investment, things to continue to do for the long term.

So we're balancing between the investments we're making as well as driving some scale efficiencies in various parts of the business as we think we can, given the scale of our business and where we're at today. And the other point I would make on this as well is we do are completely appreciative of the higher risk premium and cost of capital out in the market. And so we continue to be focused on driving high returns. But we're doing this for the long term. So 2023, strong revenue growth that's in our guidance and breakeven of $10 million of EBITDA profitability, but really focused on continuing making investments for the long term.

Darrin David Peller - *Wolfe Research, LLC - MD & Senior Analyst*

Okay. All right. That's helpful. Matt, if you could just touch one more -- just one quick follow-up. The complementary new products comment on one of your slides around the plan. I know the deal in Israel was rewire, I think, is probably going to come in some incremental offerings around insurance, you mentioned. But just can you give us a little more thoughts on what that -- what you intend on by saying complementary new products for this year ahead?

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Yes. Thanks, Darrin. I appreciate the question. So yes, on Rewire specifically, we closed the acquisition last month. The strategic rationale was twofold. One was the geographic complementary nature of the deal being able to launch Israel as an origination market as well as grow in a few other countries that they're in. And then the second was to expand exactly what your question alludes to around our vision of complementary products. And I think that in addition to just the capabilities that they -- or the products that they have built, the capabilities of that team in terms of their product and engineering expertise as it pertains to complementary products and just our core remittance business, I think will be a great addition -- so excited about that.

And as it pertains to complementary products, it's similar to Andrew's question is what I'd say is that we're much more narrowing, but focused on where we can improve and enhance our existing remittance customers' lives with additional products that are complementary to remittances. And so we're not breaking out the specifics there yet, but I think our increased focus and the pain points we're seeing from our customers there will result in some exciting things down the road, and we'll obviously share those when the time is right.

Operator

Our next question comes from Tien-Tsin Huang with JPMorgan.

Tien-Tsin Huang - *JPMorgan Chase & Co, Research Division - Senior Analyst*

Great results. Hoping you hear me okay, I'm at the airport. I just wanted to ask a lot of moving pieces here, very encouraging outlook, thinking about '23 versus '22 and how the composition of growth will be different. How would you summarize that across users, volume, ARPU? I know your cohorts are aging, but you're going after some new corridors as well. So how do you think that will be different given everything you've talked about today, if you follow my question?

Hemanth Munipalli - *Remitly Global, Inc. - CFO*

Yes. Thanks, Tien-Tsin, (inaudible) to where we're heading to. So I think in terms of -- as we look at 2023 versus 2022, I'd say broadly, it's going to be on a very similar trajectory. Again, to the point that we have about a 2% market share in a large remittance market. We have a ton of opportunity across all our corridors. We continue to grow in our sort of core corridors out of North America send destinations to multiple sort of destinations around the world. But as we talked about, we've also continued to increase our international mix. So we do see that, that will continue to increase through the year as we -- those markets we already launched, particularly in the last couple of years, will help us to continue to grow both active users and new customers in these international markets. We talked about Japan in Q3, New Zealand and Q4, and we just recently launched UAE, as we talked about now. So we're pretty optimistic in terms of the growth prospects we have internationally, and that's a lot of what's getting baked in into our top line forecast.

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Yes. And the only thing I'd add there, Tien-Tsin, thanks for the comment and the question is I think that there's something that I appreciate about meeting so this business is the predictable and repeat nature of our business and the loyalty that our customers have, both of their loved ones and families that they're sending money back to and to using Remitly to send money back to their families. And so that is something that we go into the year with confidence around repeat behavior. And then it is about how do we continue to add on healthy cohorts of new customers in both our existing and new markets. And really important just to keep in mind that within the remittance space, we're approximately 2% of the $1.6 trillion TAM that we've talked about. And so lots of room to grow, and it's both by maintaining that trust with our existing customers and then very scientifically and with a high return on investment, adding those cohorts of new customers across the globe, as Hemanth mentioned.

Tien-Tsin Huang - *JPMorgan Chase & Co, Research Division - Senior Analyst*

Got it. And then just as my follow-up, if you don't mind, just thinking about what you just said there as well as, I think, Darrin, another question, just on the M&A side and consolidation, assuming that some of your peers are also tightening their belts and including on the private side. I know you just did rewires your appetite to do acquisitions changed at all? I mean are you more willing to do things now given maybe some of the changing landscape? Or is it time to focus? I know you have rewire, but are you more focused organically at this stage versus maybe 6 months ago?

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Yes. Yes. Thanks, Tien-Tsin. It's a great question. Historically, we found organic growth and internal build to be both foundational and the best opportunities. So that's what I'd say first and foremost. But we'll -- we continuously review as we did with the rewire acquisition, where we actually ended up doing that transaction. We review all opportunities as they become available. But we have a high bar for any M&A transaction, and we'll remain disciplined in deploying capital.

Operator

Our next question comes from David Scharf with JMP Securities.

David Michael Scharf - *JMP Securities LLC, Research Division - MD & Equity Research Analyst*

Squeezing me in here. Matt, maybe one sort of general and one granular question on more of the sort of top down. As it relates to the guidance as well as the Q4 performance that we just saw, you clearly have a lot of levers you can pull and the path to profitability could take several different forms, if you wanted to even accelerate it. I'm just curious, I mean you kind of stuck to your guns and been very, very consistent in terms of the long-term vision and investment in fraud, new products, other customer acquisition strategies.

What are the types of things externally that potentially could make the company shift its focus or perhaps accelerate not just its path to profitability, but it's kind of magnitude of near-term profitability. You send a clear message, obviously, kind of you're sticking to your guns in terms of the long-term buildout. I'm just curious, is there anything externally that would kind of shift this kind of longer-term planned philosophy?

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Yes, I really thought the question. I think that the way that I view capital deployment and ultimately in service of accomplishing our long-term vision, which, as you said, remains unchanged, which is really to transform and improve the lives of immigrants and their families by providing the most trusted financial services on the planet. I take that in our journey to that, there will be different times where capital costs vary. And that's -- I view it in a little bit less binary and a little bit more on a spectrum. And so what we've seen in capital markets recently, obviously, is with interest rates rising, the cost of capital is increased, and that's okay, especially for a business like ours that I think is very disciplined about the investments that we make and very quantitative and analytical in terms of how we deploy those investments.

And so we have increased the hurdle rate for the investments that we're making. You can see some of that with the profitability in Q4. You can see some of that with our guidance in '23 and pulling forward some of the guidance in terms of the past and now being profitable. And what I would say is that we do continue to monitor and look at the cost of capital as we march towards our long-term vision, but we're also still very committed to that long-term vision. So proud of being able to do both. I think it's a reflection of our discipline in terms of capital management and also our customers in terms of the resilience and the importance of the service that can kind of withstand various macroeconomic shifts given the criticality of our service. So that's how we think about it overall. It's less binary more on a spectrum with a good handle of the investments we're making and able to adjust those based on what the cost of capital is in the market.

David Michael Scharf - *JMP Securities LLC, Research Division - MD & Equity Research Analyst*

Got it. That's very helpful. I mean it's been a very, very consistent sort of vision and execution. And it sounds like externally, interest rates and capital cost has probably been the only factor thus far, that's changed things on the margin. I want to follow up a little more granular question. I wanted to ask you a little bit about some observations on a corridor. Not all corridors are created equally. U.S. to Mexico is the largest in the world. It tends to be the most profitable for most remitters. And I think relative to some of your other markets, it probably has a lower mix of banked customers, i.e., ones that can send online who can fund remittances with a debit card out of a demand deposit account.

Can you just talk -- which also speaks to just how much incredible opportunity there is ahead of you, not just globally, but especially in the world's biggest corridor. Can you talk a little bit about what you're seeing in terms of, I guess, the trends towards the Latin American center in the U.S. outbound in terms of adopting banking products becoming part of your true TAM addressable market because something is clearly kind of moving a little more than it was a few years ago when it lags so many other markets in terms of being banked. Are you noticing a change in the opening up of that funnel even wider for that corridor?

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Yes. Phenomenal customer-centric question as we would call it. I think that the plunge line is yes, we're seeing -- well, actually, first, let me say, I love your comments that not all markets are created equal. What we call that internally and some of the external messages that we've shared is localization at scale, and that's something that I think that we've done well. And as part of understanding various markets, it's important to understand what you just said, which is what is their comfort level and ultimately, trust with digital channels, specifically trusting a mobile phone to send money back home. And that has varied historically. So that's one of the reasons, if you look back 10 years, we started with the Philippines, then we went to India and then we launched Mexico in that order. We're talking 10, 11 years ago now.

And what we've seen in Latin America and broadly is the phenomenon that we knew we would see, which is additional smartphones, both affordability and access and then reliable and affordable data access. And I think we are seeing more and more customers and use their mobile phones and trust it for financial services, and that certainly includes the Mexico and Latin America market. So it's an exciting time in that way to be a digital money transmitter not only because of the growth in TAM and the growth in our business, but also because we provide just a much better experience, we take a bunch of costs out of the system, and we're improving those customers' lives. So you're picking them on a trend that's absolutely accurate.

Operator

Our next question comes from Alex Markgraff with KeyBanc.

Alexander Wexler Markgraff - *KeyBanc Capital Markets Inc., Research Division - Associate*

Actually I have a couple. Maybe first, I wanted to come back to the Slide 16 with some of the helpful disclosure, particularly around marketing expense improvements. Just curious, I guess, thinking about '23 and some of the more sustainable execution wins as you titled them here, that could carry over versus the macro factors. Is there any way to just kind of roughly attribute the -- of that 660 basis points, how much is more related to macro factors? I'm asking just kind of wanting to understand in the kind of worst-case scenario where the ad environment does become far more competitive in '20 to '23 than you're expecting? Just kind of what the headwind could be to some of the expected efficiencies.

Hemanth Munipalli - *Remitly Global, Inc. - CFO*

Yes. Thanks, Alex. It's something that we think about a lot here as well and as we continue to monitor what's going on in the advertising market. So I think as we called out on Slide 16, the brand awareness and word of mouth effects have continued to increase for us. And I think we've talked about that for a number of quarters now. But just given the repeat behavior we see we're seeing that customers really want to come back to us. And through them, the word of mouth of that to continue to spread. So that is a growing effect. And as we get bigger and bigger, we're really optimistic about where that could take us.

And we're also continuing to work on the unpaid channel side of things, whether it's search engine optimization, it's landing pages and all the things that we would do to continue to increase our mix towards more unpaid versus paid channels. And Matt also talked about localized digital marketing, which we think is another thing that we can continue to sustain, but they all get better with scale. So I would say those are some of the factors we feel good about in terms of what we can control from an execution perspective and what our customers bring to us in terms of some of the word of mouth effect. So that should in theory sustain and improve over time.

The advertising market is obviously something that we don't fully control. There's multiple dynamics that get played out there. But we do think that, to a degree, that with our growing scale and particularly as we get more and more international and do localization at higher scale that we should be able to offset to a degree some of those effects as we get bigger and bigger. So I don't have a specific answer for you on the actual breakdown, but I would say those are some of the drivers one way or the other.

Alexander Wexler Markgraff - *KeyBanc Capital Markets Inc., Research Division - Associate*

Yes. That's helpful commentary. And then just maybe one last quick one. Hemanth, I think you talked about international growth being kind of a bigger factor in the top line formula 23. I was just curious if you could maybe to simply kind of describe any sort of like pricing differentials when you think about your various ascending geographies and some of the ARPU implications, if there are any?

Hemanth Munipalli - *Remitly Global, Inc. - CFO*

The mix of international to U.S., Canada is still relatively small for us. But what we've been seeing is that our LTV CAC where we look at from an acquisition perspective and needed economics more broadly are continued to be strong for us. So we are focused on continuing to obviously make -- provide the right pricing for our customers and which remains dynamic regardless of which corridor we look at. But we also continue to improve our cost structure. So whether it's play-in payout costs, which also go to a transaction margin as we get more and more bigger international, there's opportunities there to continue to improve our margin. Those will take a little bit of a longer time. But overall, nothing we're seeing here would suggest that we would have any sort of pressure in terms of lesser unit economics as we grow our mix internationally.

Operator

Our next question comes from Bob Napoli with William Blair.

Robert Paul Napoli - *William Blair & Company L.L.C., Research Division - Partner and Co-Group Head of Financial Services & Technology*

Maybe my questions primarily has been answered. I guess, maybe just on rewire. Any learnings there from that, that you may apply. I mean are you seeing that be efficient in helping you to expand into other corridors? And does it make you more likely to look for tuck-ins? I know you talked with Tien-Tsin's question on organic versus acquisition. You're clearly focused on primarily organic. But is -- are there any learnings from rewire that maybe could accelerate growth and to jump-start certain corridors that you see?

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Yes. Thanks, Bob. Yes, I think that it's -- first learning is, I think that the early results and again, we just closed the acquisition in January. So we're just in the process of integrating the team in the first 30 days. But obviously, we've gotten to know the team well. And I think that there has to be a foundational not only cultural alignment, but cultural additions. And when we talk about culture internally at Remitly, it's we do it with a growth mindset of having strengths and weaknesses. So I think the rewire from us. And I think we can learn a ton from them in different ways of working. But foundationally, there's a lot of overlap there. So I think we're going to work really well together from that standpoint.

And then there's 2 strategic rationale in terms of complementary geographies. It's great that Israel online now, as I mentioned, -- and I'd expect us to be able to leverage some of their product and technology and customer centricity in new markets that are similar to the Israeli market. So that's great. And then second, as I mentioned, I think around complementary products, they'll be able to help us there. So early days given that it's just been 30 days, but the foundational learning is culture is foundational for any acquisition. We feel like we got that right with this one and excited about the strategic rationale that I just went through.

Robert Paul Napoli - *William Blair & Company L.L.C., Research Division - Partner and Co-Group Head of Financial Services & Technology*

And I apologize if I missed it, but did you give any financial metrics on what you expect rewire to contribute in '23 revenue and EBITDA.

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Yes, we did not.

Operator

I'm showing no further questions at this time. I'd now like to turn it back to Matt Oppenheimer for closing remarks.

Matthew B. Oppenheimer - *Remitly Global, Inc. - Co-Founder, CEO, President & Director*

Great. Thanks so much. So thank you, everybody, for the thoughtful questions. As we always do Remitly, I'd like to end the call just by highlighting one of our amazing customers. This customer's name is James. And James joined Remitly in June of 2022 and sends money from the U.S. to his family in Kenya. And James commented, it is easy, efficient and fast way to send money. I would recommend it and have done so to others. And so we thank James and his family for using and recommending Remitly to others. I think that's another benefit as we talk about scale conceptually. When you look at it more practically, there's a lot of customers that are having a great experience like James and are kind enough to tell their friends and acquaintances about Remitly and recommending it to others. So thank you to customers like James.

And thanks, everybody, for joining us. We appreciate your support. We're excited about the opportunities ahead in '23. Look forward to sharing our progress as we continue to execute on the vision that I mentioned earlier around really improving and transforming the lives of immigrants and their families by providing the most trusted financial services on the planet...

Operator

Thank you for your participation in today's conference. This concludes the program. You may now disconnect.
