Duolingo Case Study

Product: Duolingo

Date: April 8, 2025

Type: Product Research - User feedback analysis

Define feature

Duolingo's language learning feature which is designed to help people learn and practice foreign languages. It helps users to learn a new language through interactive gamified lessons. Users select a language, practice daily lessons, and earn XP, all within a structured tree format.

Goal of the feature

The goal is to democratize language education globally and to make language learning fun, engaging, and consistent using behavioral psychology (streaks, XPs). Business-wise, user acquisition is through virality, user retention is through habit formation, and monetization is through Duolingo's premium subscription.

User Personas

Student who wants to learn French for school.
Professional preparing for an international exam.
Traveler learning Spanish for a trip.
Language enthusiast picking up a new hobby.

User Problems → Duolingo Solutions

"I forget to practice daily."	Streak reminders + notifications
"I lose motivation easily."	Gamification - XP, streaks
"I don't know where to start."	Skill tree for guided learning path

User Journey

Sign-Up and Profile Creation → Assessment and Goal Setting → Skill Tree and Lessons→ Interactive Lessons→ Gamification Elements→ Feedback and Correction→ Language Skills Development→ Progress and Achievement→ Community Interaction→ Continued Learning→ Goal Achievement→ Profile and Settings

Metrics

User Engagement:

- **Daily Active Users (DAU)** - The number of users who engage with the platform daily.

- **Monthly Active Users (MAU)** - The number of users that engage with the platform monthly.

- **Average session time** - Average time a user spends in one app session.

Retention:

- **Streaks** - The number of consecutive days a user practices on Duolingo.

- **Day 7/14/30 retention** - The percentage of users who return to the app 7th, 14th, and 30th day after sign up.

- **Course completion rate** - The number of users who have successfully completed a language course.

Learning progress

- **XP earned** - XP are earned as users complete lessons and activities.

- **Skill mastery** - A measure of how well a user knows a specific language.

- **Course completion rate** - % of users who finish a full course.

Conversion

- **Duolingo plus subscription** - The number of users subscribing to premium features, indicating revenue and user interest.

- **In-App Purchases**: Revenue generated through in-app purchases, such as ad removal or additional content.

User Satisfaction

- **User reviews and ratings** - Collecting user feedback through ratings and reviews
- **Net Promoter Score** - A score that shows how likely users are to recommend the app to others.

Educational Impact

- **Educational Partnerships**: Building partnerships with educational institutions for integration and recognition.

Opportunities for improvement

Source	User Problem	Root cause	Suggested solutions	Metric Impact
Youtube comment	"Longer courses, more ads, more paywalls."	Static course paths	Adaptive learning path	Improves session time
Quora	"It never explains why an answer is wrong."	No rule based hints	Smart hints mode -AI generated hints	Improves retention
Reddit	"Lessons are 90% animations now... it's just fluff."	Overuse of animation for serious learners	Create a toggle for "Minimal UI Mode" for faster learners	Improves retention of advanced learners

As an English teacher, I can say that Duolingo has its ups and downs. The biggest down for me is the nonsense sentences you will never use in real life. The biggest up is the fact that you can study all four - writing, speaking, listening and reading. One of the downside is the missing grammar part - the basic conjugation of the verbs to be and to have. You learn it through many exercices... In conclusion, Duolingo is not bad, but clearly you shouldn't use only this app to learn a new language. You should combine it with the apps that focus more on speaking, rather than just on writing, reading and listening.

💡 **Why I chose to focus on error explanations:**

While analyzing user feedback on Reddit and the Youtube comments, I noticed a repeated frustration among users who did not understand why they got the answers wrong. This can reduce trust and learning confidence. I saw an opportunity to introduce micro-explanations without disrupting the gamified flow.

Conclusion

Duolingo succeeds brilliantly as an entry point for language learners—its gamified system and wide reach make it one of the best tools to start learning a language. However, user feedback analysis shows that the current learning experience lacks depth and adaptability as users progress.

Key insights show that:

- **Content becomes repetitive and boring**, reducing long-term engagement.
- **Lessons lack real-world sentence structures and practical verb usage**, making it harder to apply learning in real scenarios.

This includes:

- Introducing **dynamic lesson paths** based on user performance,
- Updating content to include **contextual, real-world conversations**, and

With these improvements, Duolingo can not only *attract* users but also truly retain and empower them to reach fluency.