

Games: Ourunique approach to drive growth

Alexandre Pelletier-Normand, Head of Games

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Games overview



03

Our unique approach to drive organic growth

- Diversified portfolio
- User Acquisition
- Genre mastery
- Live operations

M&A enabling additional growth

Summary





Who are we? 349 # of live # of new **Studios** Games

Employees

games¹⁾

of games in Top 100²⁾

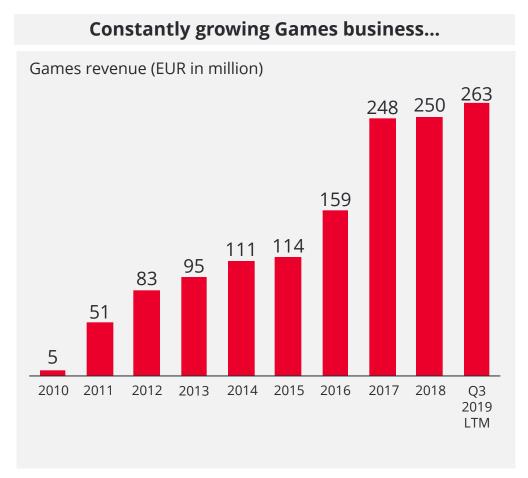
games in development

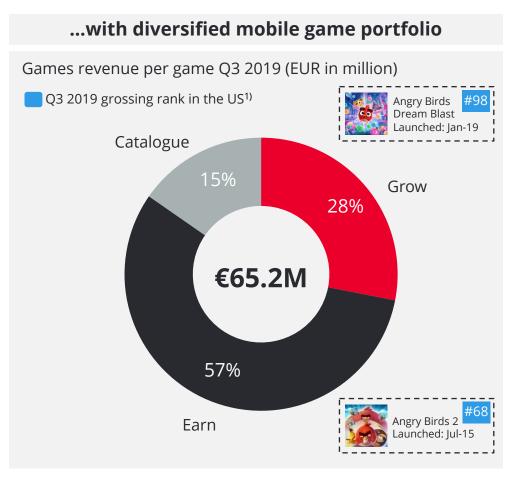
Note: 1) Games which have normal or lean live ops (e.g. events) 2) Top grossing games in the US on iPhone in Q3 2019 Source: Rovio, App Annie

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Growing games business with diversified portfolio

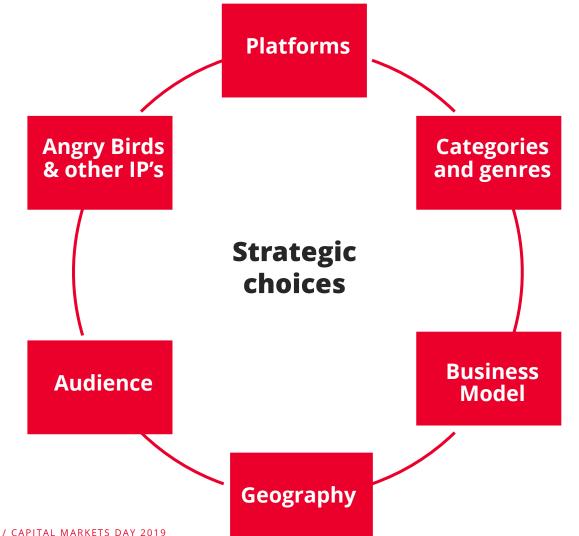




Note: 1) Top grossing games in the US on iPhone

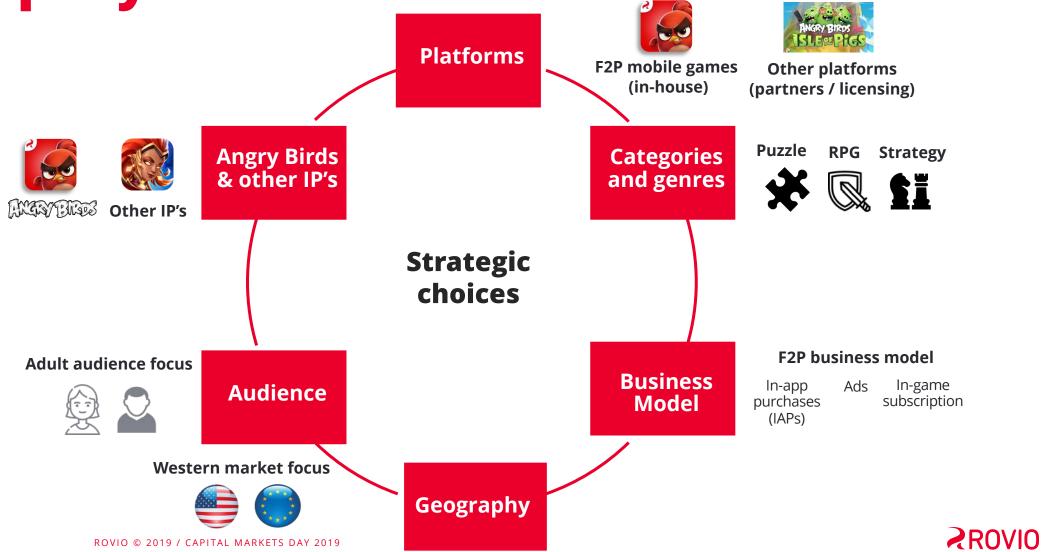
ROVIO

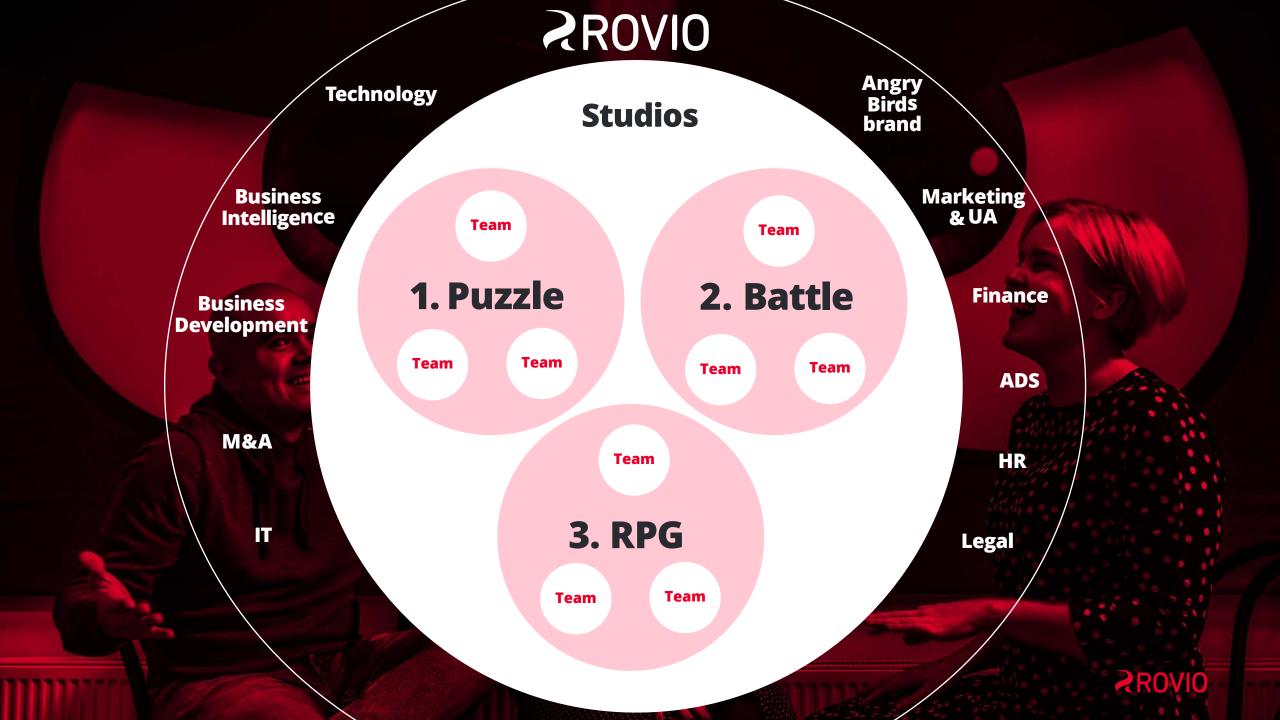
We are Free-to-Play (F2P) mobile gaming company with clear focus



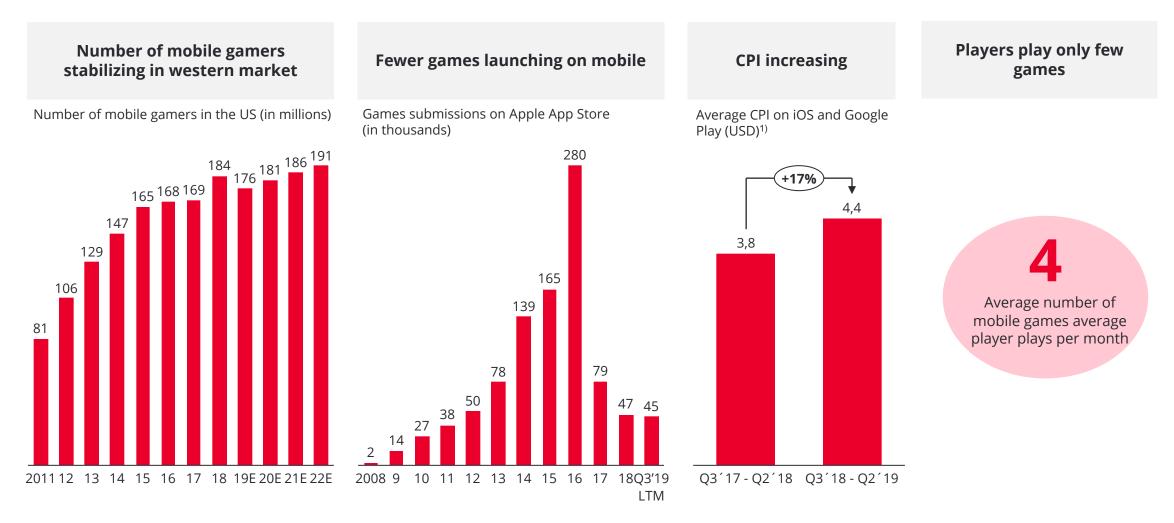


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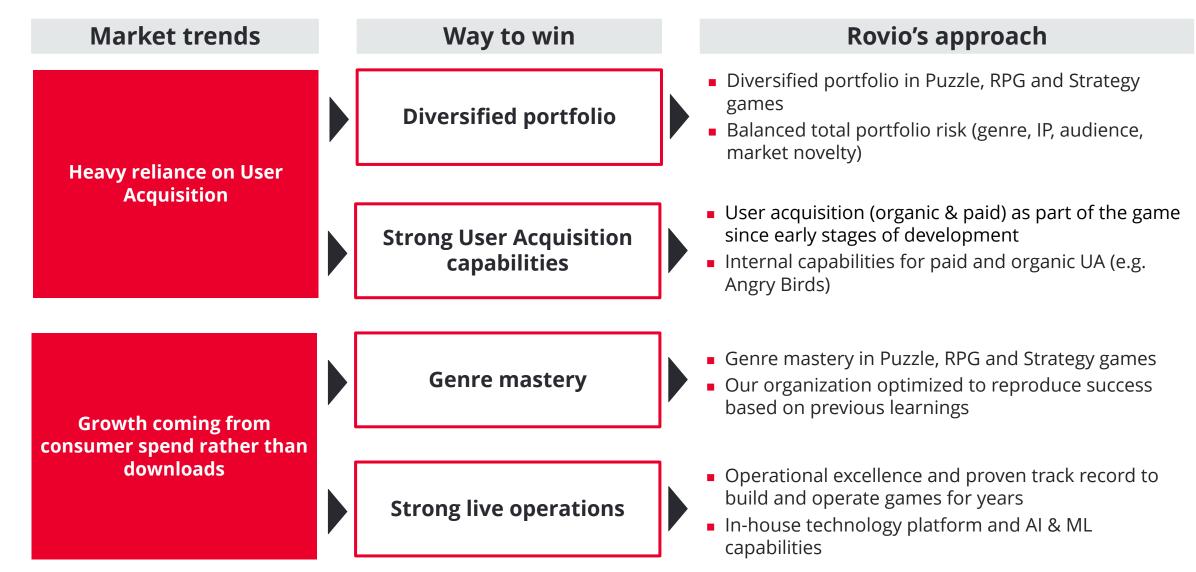
Mobile gaming competition is getting tougher



Note: 1) Liftoff's 2019 Mobile Gaming Apps Report based on 555 total apps, 81.8M installs and 1.6B clicks between June 2018 – May 2019 Source: App Annie, eMarketer, IDC, Liftoff, Newzoo, Pocket Gamer, Rovio



Market trends and way to win





Our organic and inorganic growth strategy

Organic growth	Inorganic growth
Diversified portfolio	M&A
User Acquisition	
Genre mastery	
Live operations	

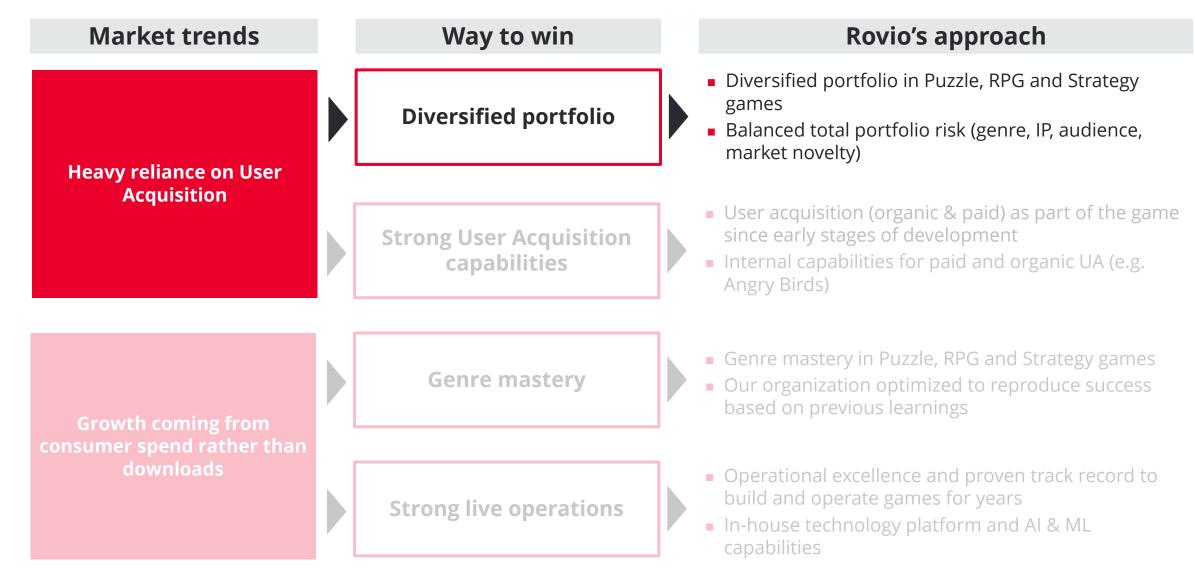


Organic growth is our main focus, let's cover that first

Organic growth	Inorganic growth	
Diversified portfolio	M&A	
User Acquisition		
Genre mastery		
Live operations		



Market trends and way to win





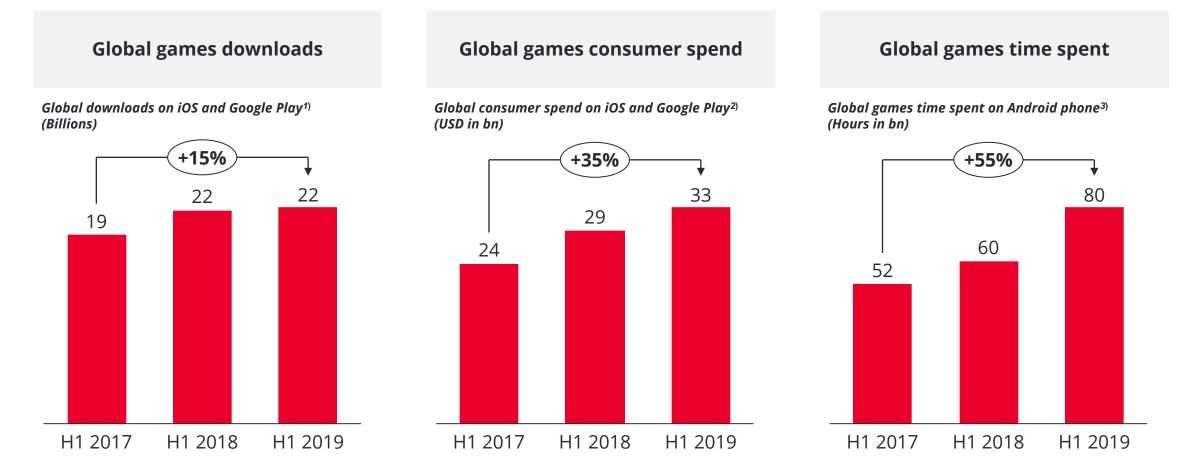


How to create diversified portfolio

Michail Katkoff, Head of Battle Studio

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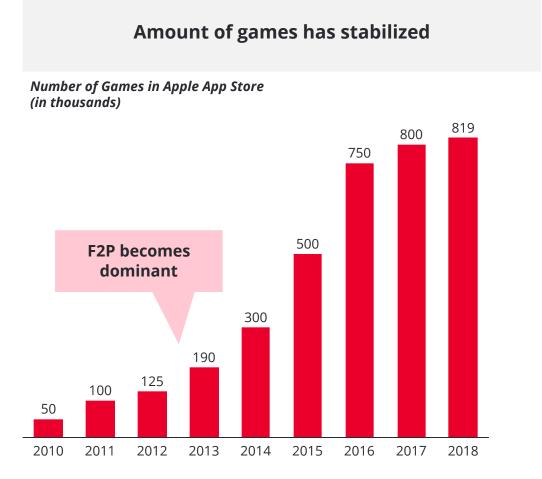
Global Games Downloads, Consumer Spend and Engagement Continue to Climb



Note: 1) iOS only for China 2) iOS only for China 3) Exclusing China Source: App Annie

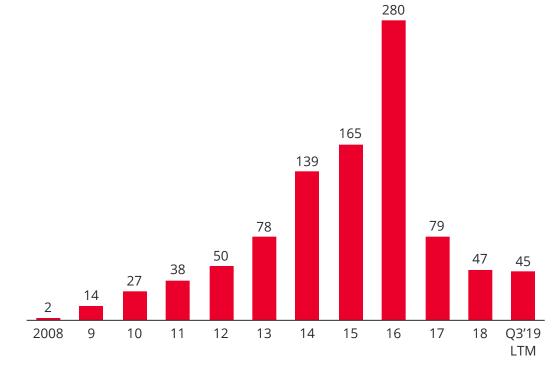


However, the amount of games in the market has stabilized since 2016 due to drop in the amount of games entering the market



Fewer games launching on mobile

Games submissions on Apple App Store (in thousands)



Source: Pocket Gamer

The top is getting wider creating more revenue opportunities



Top 100 Grossing account of overall Games' IAP revenue in the US on iOS + Google Play Number of Games that generated more than \$25M in IAP revenue (US + key Western markets)

62 in 2016

85 in 2018

107 in Q1-Q3 2019

Source: App Annie, Rovio

How the top is evolving...

55% 9months

23

of Games in US Top 50 Games (iOS & GP) by consumer spend have been there since January 2017.

is the average time it took for new games to reach US Top 100 Games (iOS & GP) by consumer spend after launching globally.

Games entered US Top 100 Games (iOS & GP) by consumer spend between H2 2018 and H1 2019



...and Rovio is among Top 20 Publishers

19

Companies that have more than one game in the US Top

200 Games (iOS & GP) by consumer spend



Angry Birds 2

Global launch July 2015

52 Months in Top 100 US

0 Months to reach Top 100 US

Angry Birds Dream Blast

Global launch January 2019

5 Months in Top 100 US

6 Months to reach Top 100 US

Note: Top 100 US refers to US Top 100 iPhone games by consumer spend Source: App Annie, Rovio

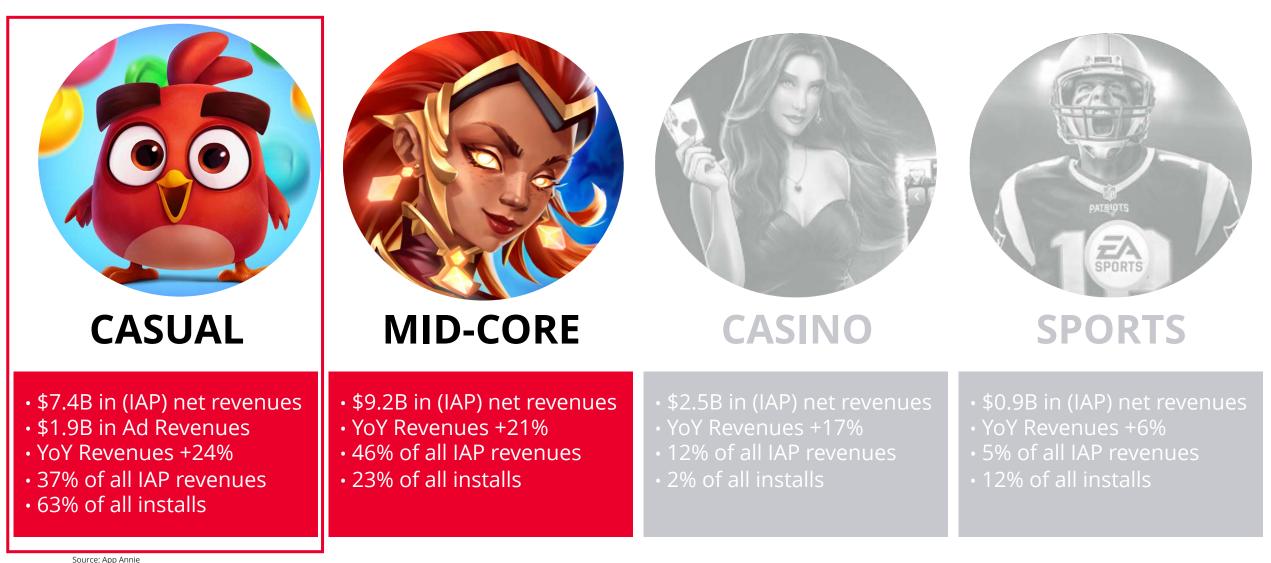
How do we identify opportunities and succeed in the market?



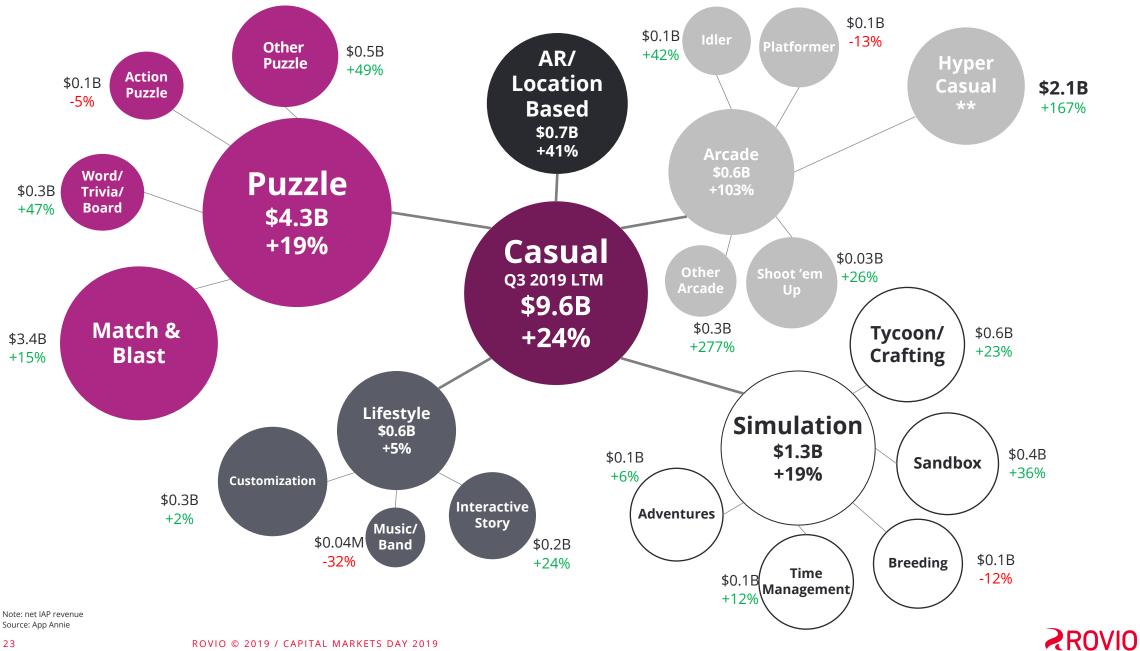
The Mobile Market – Q3 2019 LTM

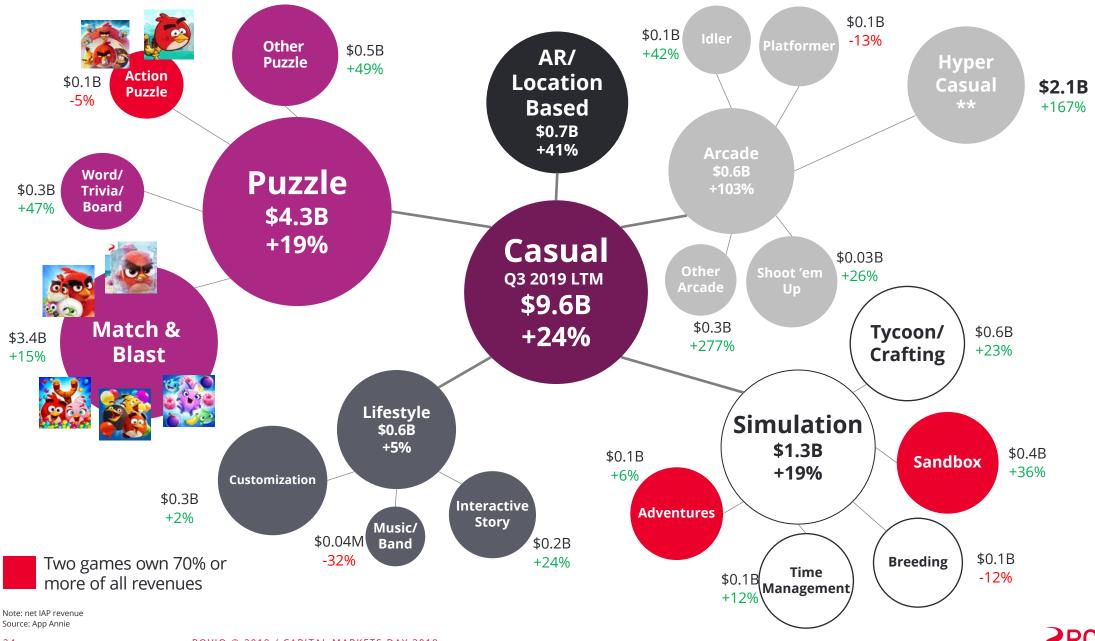


The Mobile Market – Q3 2019 LTM









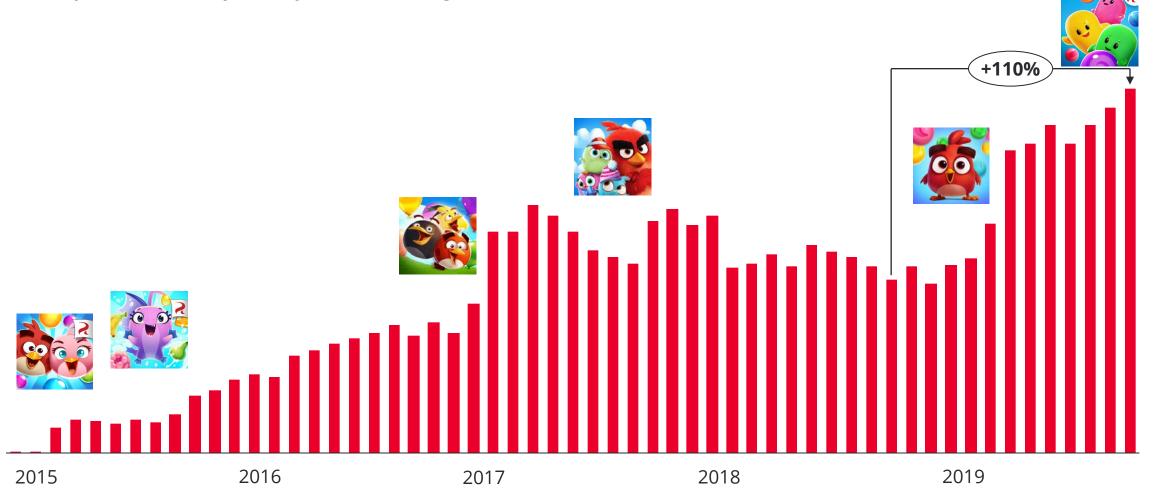
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ROVIO

Growing revenues

Monthly revenue development of Puzzle Studio's games 01/2015 – 09/2019



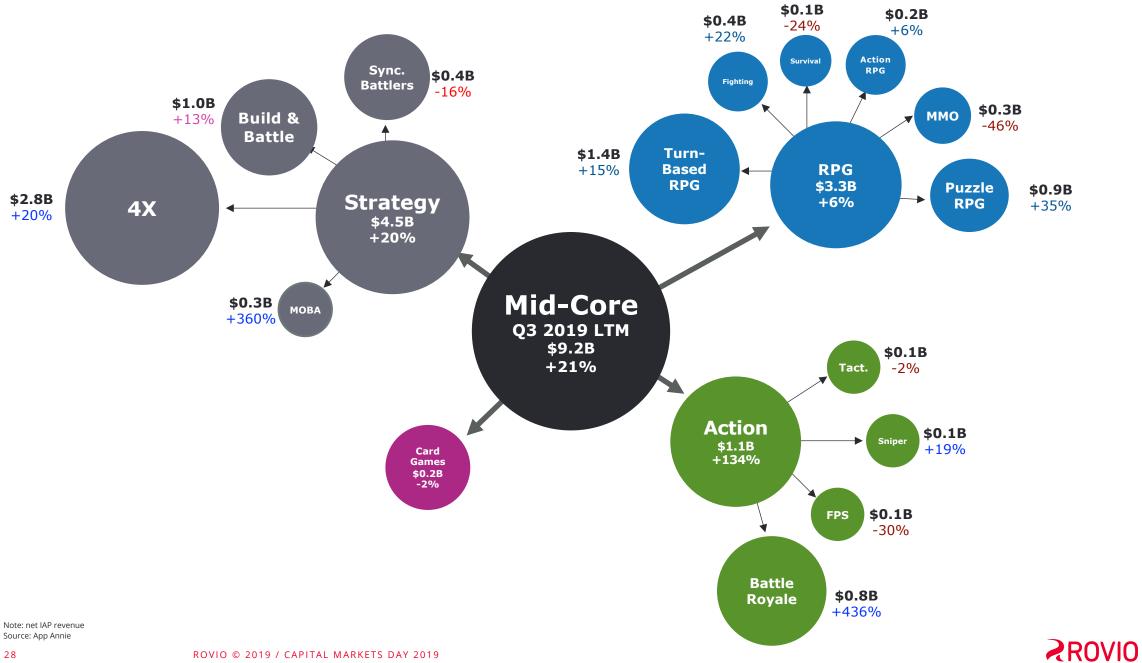


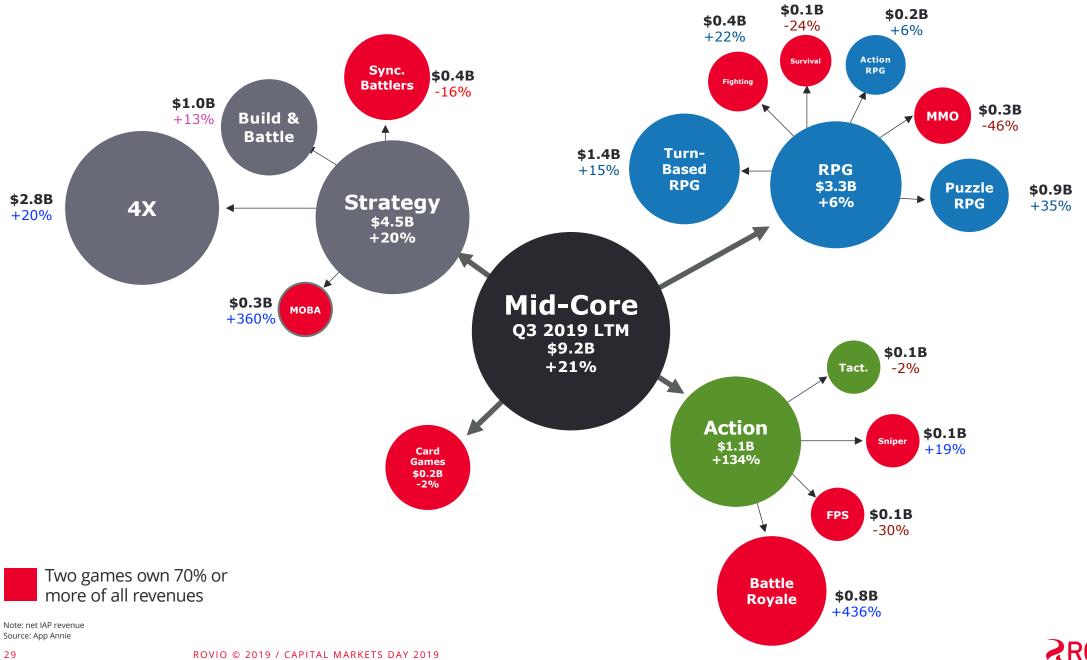
How do we identify new opportunities?



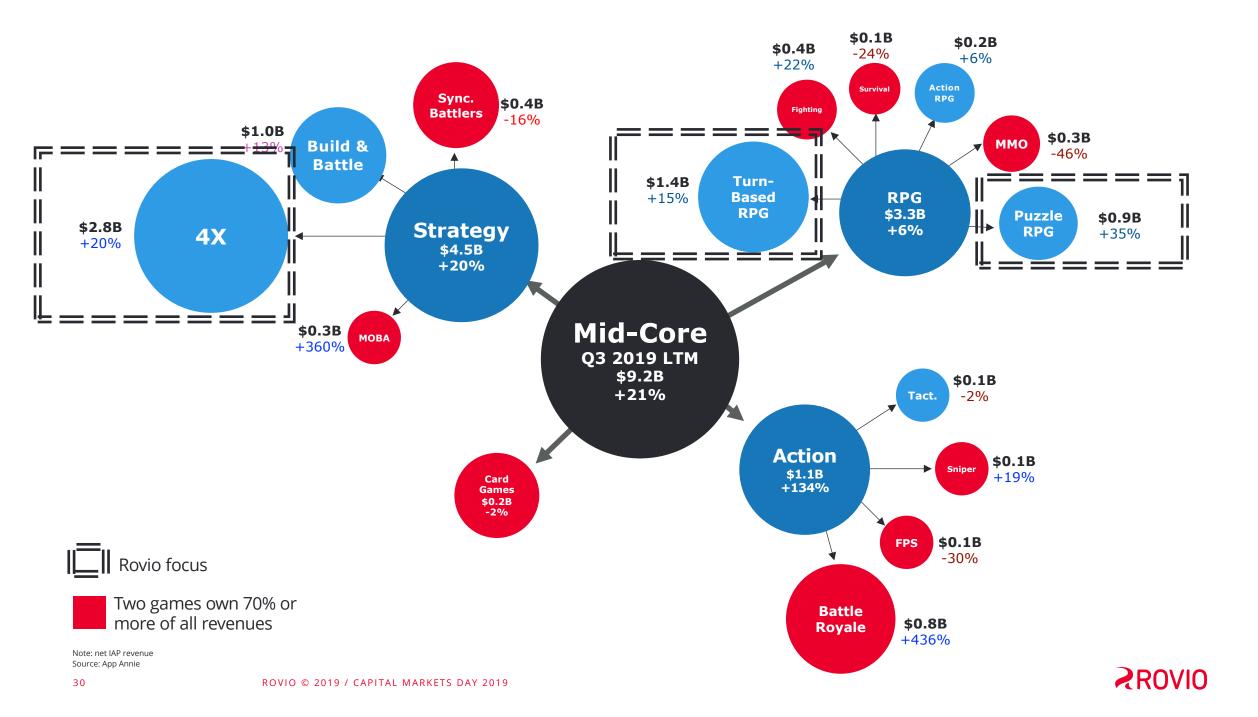
The Mobile Market – Q3 2019 LTM

CASUAL	<image/>		<image/>
 \$7.4B in (IAP) net revenues \$1.9B in Ad Revenues YoY Revenues +24% 37% of all IAP revenues 63% of all installs 	 \$9.2B in (IAP) net revenues YoY Revenues +21% 46% of all IAP revenues 23% of all installs 	 \$2.5B in (IAP) net revenues YoY Revenues +17% 12% of all IAP revenues 2% of all installs 	 \$0.9B in (IAP) net revenues YoY Revenues +6% 5% of all IAP revenues 12% of all installs

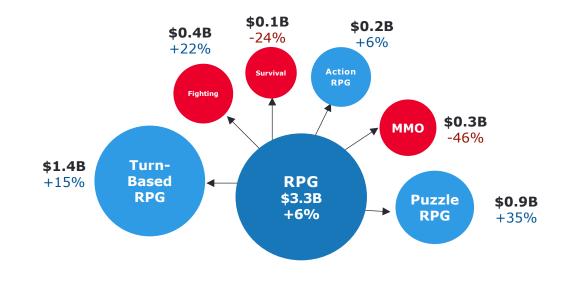




ROVIO



#1 Target Genre: RPG Games



Two games own 70% or more of all revenues

Note: net IAP revenue Source: App Annie RPG genre is 3rd largest on mobile with plenty of potential for growth compared to Asian market.

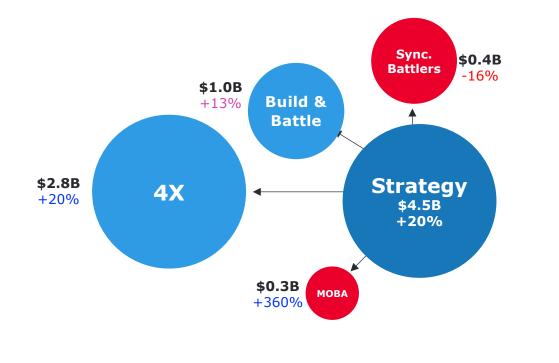
We have the experience. Our RPG games Angry Birds Epic and Angry Birds Evolution have accumulated close to 100M installs to date.







#2 Target Genre: Strategy Games



Two games own 70% or more of all revenues

Note: net IAP revenue Source: App Annie The 4X sub-genre is the second largest on mobile with a very rapid growth rate.

Strategy games are notoriously difficult to build due to technical complexity. This creates an entry barrier for many developers.

We have the technical capabilities and the genre mastery through the acquisition of PlayRaven.







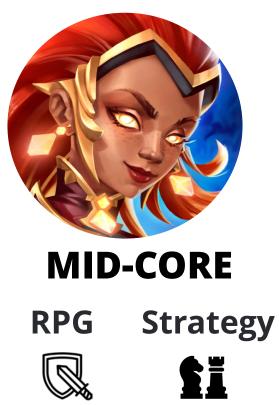
In summary we focus on Puzzle, Strategy and RPG to build diversified portfolio



CASUAL

Puzzle

We will continue to expand our presence in the casual games, focusing mainly on the largest sub-category on mobile: Puzzle games



We will continue pushing into mid-core taking calculated shots that leverage our learnings on RPG and Strategy games.



Our diversified games portfolio and pipeline

Live portfolio		New games in development			
Grow	Earn	Catalogue	IP	Angry Birds	New IP
2	3	20+	In dev	4	5
Sugar Blast Angry Birds	Angry Birds 2 Angry Pirds		In soft launch	1	2
Dream Blast	Angry Birds 2 Angry Birds Match Match Angry Birds Friends			Angry Birds POP Blast	World QuestSmall Town Murders

Market trends and way to win

Market trends	Way to win	Rovio's approach
Heavy reliance on User Acquisition	Diversified portfolio	 Diversified portfolio in Puzzle, RPG and Strategy games Balanced total portfolio risk (genre, IP, audience, market novelty)
	Strong User Acquisition capabilities	 User acquisition (organic & paid) as part of the game since early stages of development Internal capabilities for paid and organic UA (e.g. Angry Birds)
Growth coming from consumer spend rather than downloads	Genre mastery	 Genre mastery in Puzzle, RPG and Strategy games Our organization optimized to reproduce success based on previous learnings
	Strong live operations	 Operational excellence and proven track record to build and operate games for years In-house technology platform and AI & ML capabilities





UA Strategy: Fueling the growth

Alexandre Pelletier-Normand, Head of Games

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User Acquisition



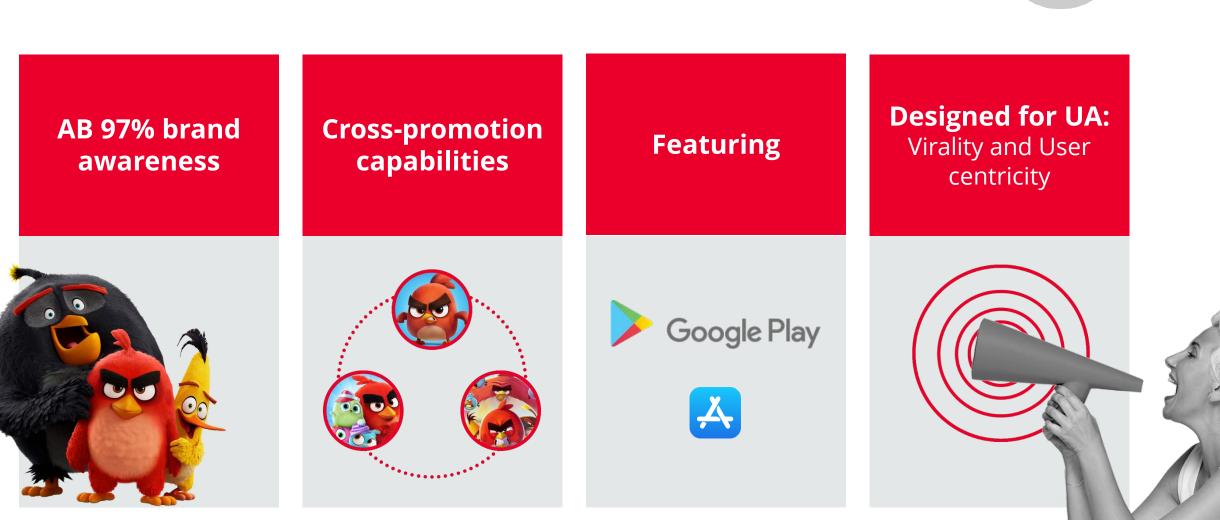


Paid



Organic



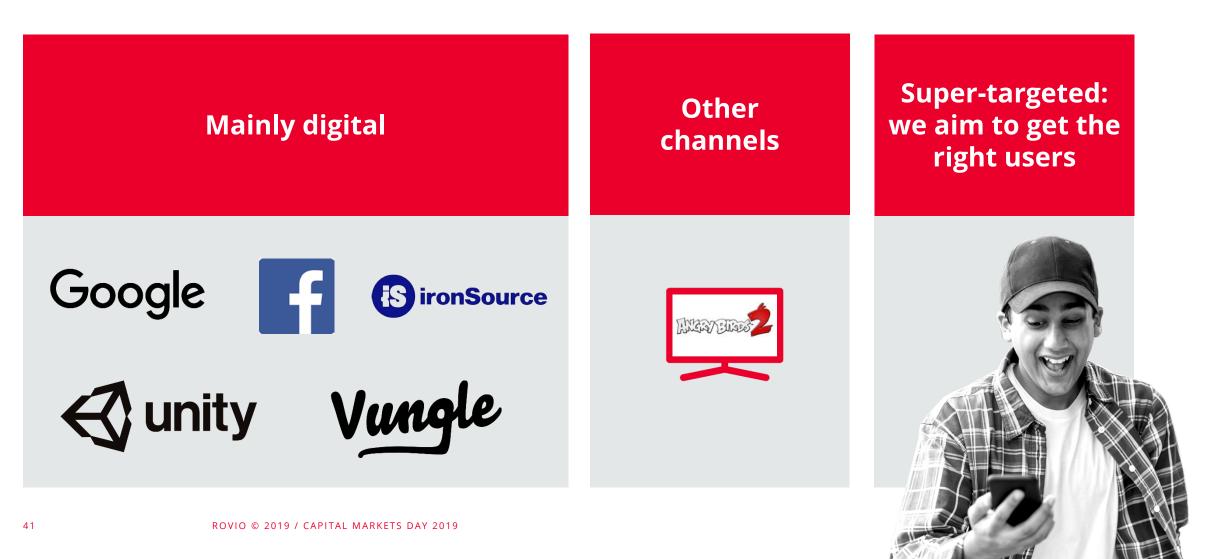


Organic UA









Paid UA Strategy

• Aiming at 100% ROI level after 12 months



100%

Why do we increase our UA investments?



Changes in the UA market landscape



Capitalizing on punctual events (external or internal to the game)



Changes in the Life-Time-Value (LTV) of our games



New game launches



World class UA team

NIMBLE

Embedded within game teams allows for custom made strategies per game and fast learning

AGILE

With central director, constantly pushing the craft forward and deciding the spent where it is more profitable

TECH SAVVY

All the most strategic knowledge is in-house: UA team works closely with tech team to utilize AI/ML to optimize and automate where possible

ROVIO

Supported by BI and Tech teams

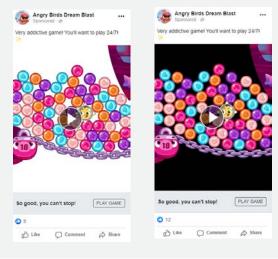
Note: AI = artificial intelligence, ML = machine learning

Examples of use cases where we are using or testing AI & ML

LTV-model, which updates automatically daily and adapt to recent data of recent performance



Analyzing what kind of video creatives perform well and testing also to create new videos

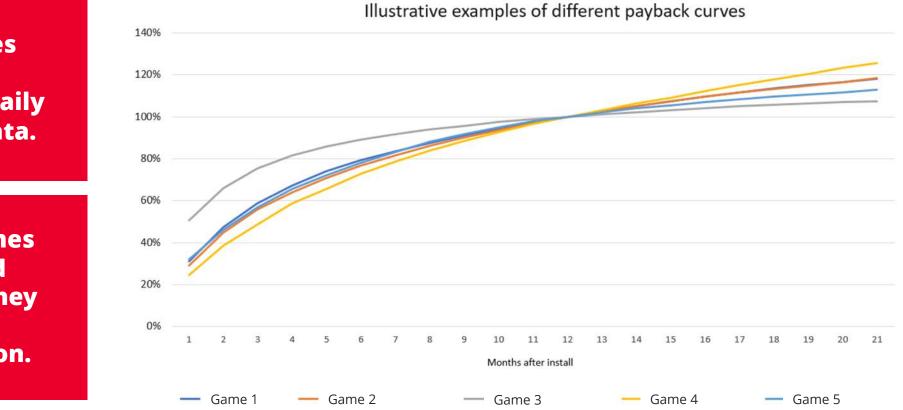


Churn prediction in a player level to find the optimum time to start promoting more about our other games





We use a Machine Learning model that creates targets on different games, markets and user sources



Model updates target ROIs automatically daily using recent data.

Since some games monetize and retain longer, they require less payback early on.

ROVIO

Illustrative payback journey

We aim for 0% return over 12 months – after that everything is profit

Portfolio effect gives us 5-10% discount on CPIs UA investments and revenues (USD) ROI (%) 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 Months after install

K-factor Revenues

Portfolio Revenues

Payback journey of a cohort



UA Investment

IAP + Ads Revenue

Market trends and way to win

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Genre mastery and learning

Tero Raij, Head of Puzzle Studio

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Genre mastery

How we have built genre mastery in Puzzle

Game examples



Genre mastery at Rovio





Case: Puzzle Studio



Our Puzzle Games



2015

- Angry Birds POP!
 - a bubble shooterco-op with 3rd party

Fruit Nibblers

our first internal game, match-3 core

2017

- Angry Birds Blast
 - our first tap-to-clear game, co-op with 3rd party
- Angry Birds Match

 our second match-3 game



- Angry Birds Dream Blast
 - internal game with fresh physics based puzzle core

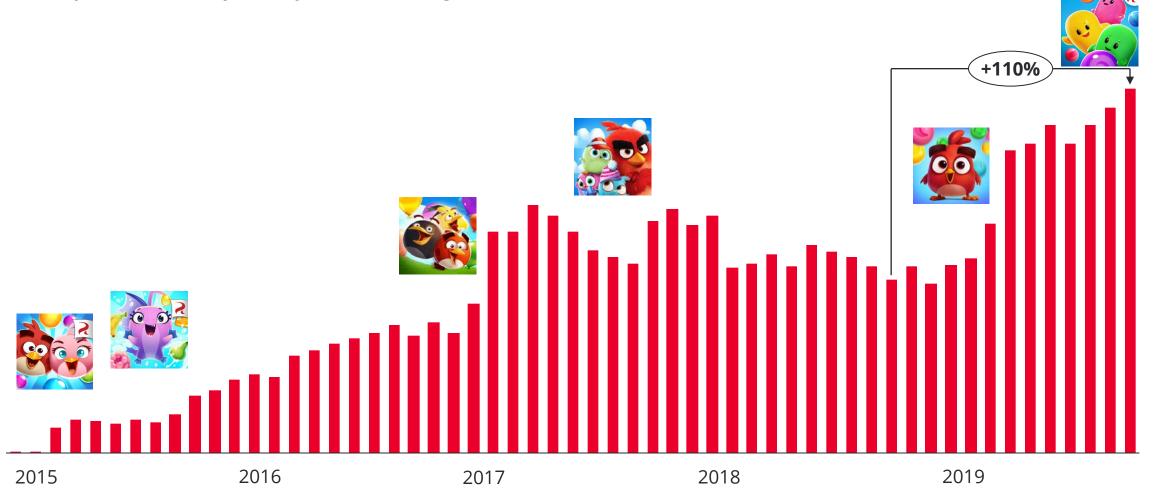
Sugar Blast

leveraging the core from
 Dream Blast with new IP



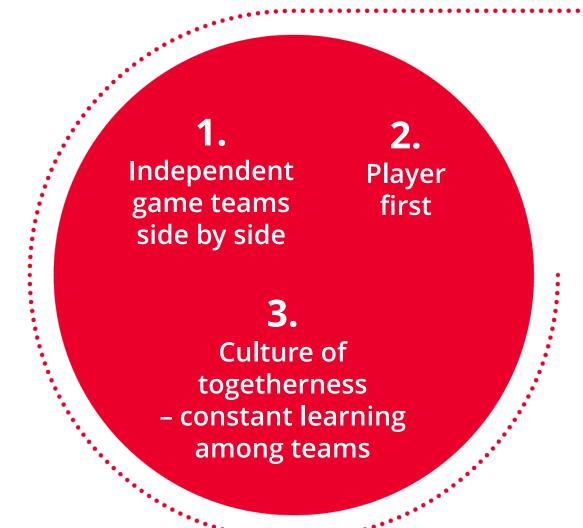
Growing revenues

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Studio – Building Genre Mastery Together



Repeated Success Growth and Predictability



Today competition is as much about marketability as it is about the great game experience. Standing out from the competition is critical.

We discover new

level-based core gameplay

Mastering the

in-level experience



We create rich player fantasies through narrative



Great level content is extremely important - but not enough alone. Core gameplay is in the heart of marketing mass market game. Strong theme enables differentiation from competition.





ANGRY BIRDS

Angry Birds Dream Blast



MISSION

Claim physics based tap-to-clear puzzle mechanic to Rovio



THE MISSION

Marketing innovation new IP for widening up the audience

No significant changes to the core or meta of Dream Blast

A very fast production: only 5 months to Global Launch



0.0

Different audiences between Angry Birds Dream Blast and Sugar Blast

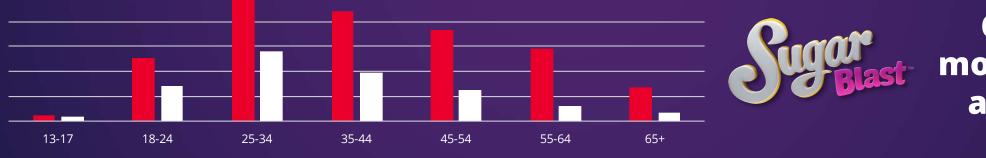
Age & Gender distribution





Younger audience

Age & Gender distribution



Older & more female audience

Source: Facebook Analytics (Oct 22, 2019)

Female Male



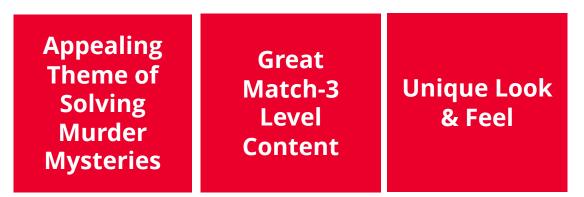


Small Town Murders

MISSION:

Take ownership of a compelling theme - highly familiar to the audience - but new in match3

CORE PILLARS:





We aim to replicate the success built in Puzzle studio in RPG and Battle studio

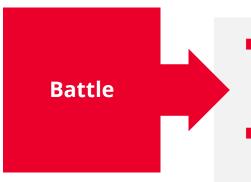
Why we can succeed

- Our previous two RPG games (Angry Birds Epic and Angry Birds Evolution) have accumulated over 90M installs
 - Our Puzzle Studio has built expertise that can be used to succeed in the Puzzle RPG sub-category

Example projects in pipeline



World Quest: RPG game



RPG

- Internal tech from Battle Bay, our internally developed MMO Battle game
- Acquisition of PlayRaven a team that has built strategy games for over 6 years



PlayRaven: strategy game

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How we build games and operate them for years

Miika Tams, Co-lead of Puzzle Studio

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Execution in NEW GAME development



How do you recognize a great games team?

They make things happen.



ROVIO

How we build a game

Senior game dev team Market opportunity

Game vision

Focus

A good mix of juniors and seniors bring both the energy

and experience.

Team identifies the **audience needs** – and create the game for that audience.

Team sizes the **opportunity** and the **risks** involved. Team can **imagine** what the game will be.

Team makes sure that their **vision** is right for the audience. Team **starts building the GAME** from the critical pieces, in the correct order.

Team delivers with high diligence.



Team is **driven** to get the game to the hands of their target audience

Team has **the right processes to support** their style of working.





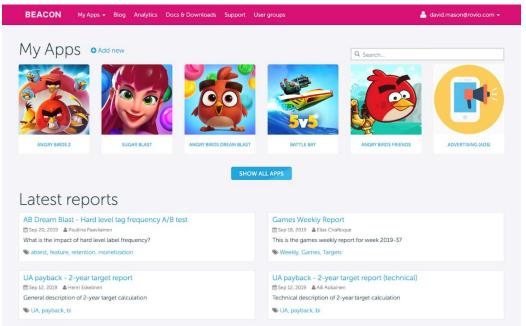
Technology -Building competitive edge

Rovio's cloud services for game teams (Beacon)



In-house technology platform - Beacon

Fast integration with user-friendly interface



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Sign in with Apple -iOS 13 2019-09-13 2019-08-21 Ravikiran Belku



BEACON by ROVIO

Enables game teams to create a successful game



Live Ops, development, testing, QA tools



Actionable real-life analytics through player profiles, segmentation and targeting



AI & Machine Learning

UA tools and support



Monetization

Developed since 2011 with great time, effort and investments



AI & ML will fundamentally change how games are developed, operated and marketed

Rovio experiments Machine Learning:

- 1. To **identify** market opportunities
- 2. To **optimize** UA and marketing
- 3. To **personalize** games for players
- 4. To **understand** the motives and behaviour of players
- 5. To develop & operate games



Our vision for AI & ML

IN 2022 ROVIO HAS A GAME TAILOR MADE FOR INDIVIDUAL PLAYERS





Example Machine Learning use cases:

- Level balancing

- Generating new levels







Execution in LIVE GAMES



LIVE OPERATIONS

The ability to keep the game fresh and have top monetization with the features you already have and optimize new features to the maximum

- Optimization
- Events
- Offers
- Short Development Time

Increases and sustains revenue

LIVE DEVELOPMENT

The ability to develop new areas to spend and fundamentally change user behavior to create baseline shifts in revenue

- Fundamental Shifts in User Behavior
- Rethink Old Features
- Add New Features
- Longer Development Time

Creates baseline shifts in revenue



LIVE GAMES process





ANGRY BIRDS

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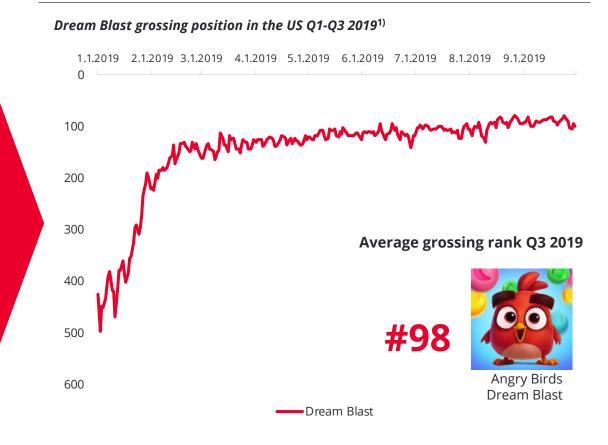


Journey into Top 100 grossing game

Growth enablers

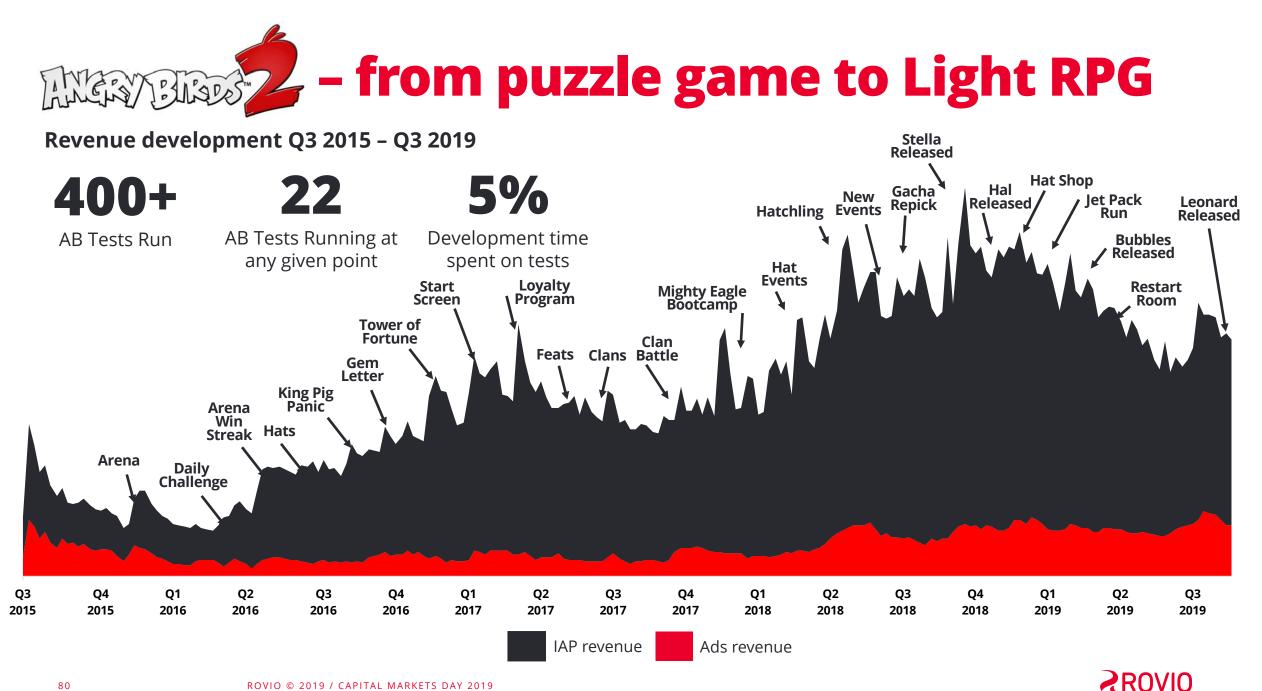
- Effective live operations
- 2 Fast level production pace
 - Improved baseline retention
 - Ability to scale the game fast
- 5 Strong mentality and process for testing

Reached Top 100 Grossing in 6 months



1) iPhone Top Grossing Games Source: App Annie, Rovio





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Late game revenue	Fun to spend	The flow of the game
Improve the revenue impact of being social and competitive .	Improve the conversion with new ways of making it fun to spend.	Improve the connection between features in the game.
Make it clear what it means to be in a clan .	Example: in-game subscription.	It should always be clear for a player what to do next .



M&A provides additional growth opportunities

Organic growth	Inorganic growth
Diversified portfolio	M&A
User Acquisition	
Genre mastery	
Live operations	





M&A: Enabling additional growth in Games

Timo Rahkonen, Head of Strategy & M&A

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M&A market in mobile gaming

Rovio M&A strategy

03 °

02

Case PlayRaven



Mobile gaming is very fragmented market with several trends supporting consolidation...

Fragmented market



Trends supporting consolidation

- Difficult to reach top grossing charts big companies like Rovio dominate
- Industry dynamics favor scale especially in marketing and UA investments
- Rising development costs AAA quality also in mobile
- New technologies and platforms emerging
- East-to-west, west-to-east has remained challenging

* Source: Pocket Gamer, Rovio

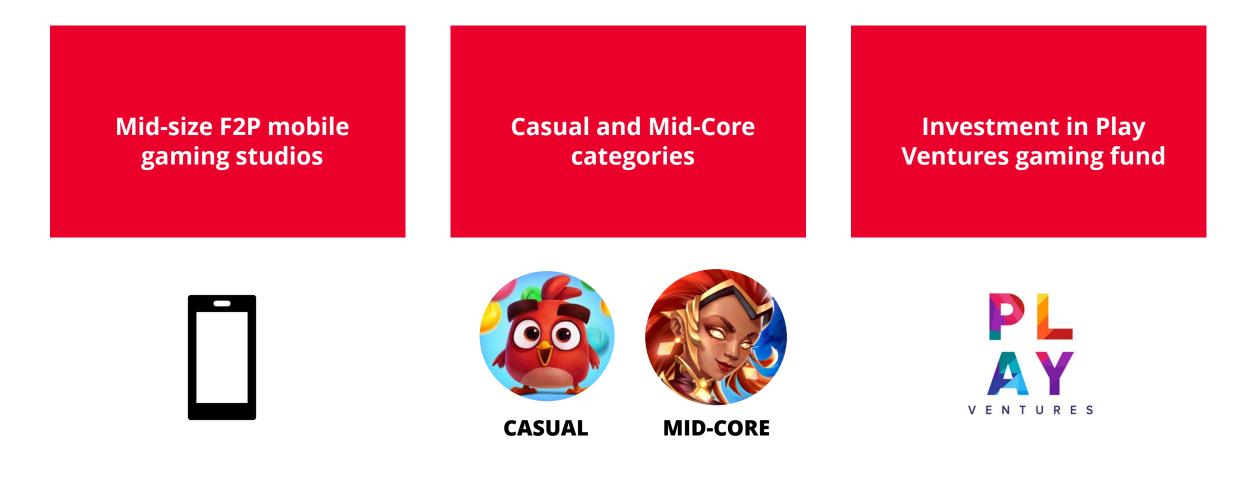
...however, consolidation is progressing quite slow

Number of mobile gaming studio deals (H1 2017-2019) Number of mobile gaming studio deals (H1 2017-2019) with value > €10M¹) 20 18 17 10 7 4 H1 2017 H1 2018 H1 2019 H1 2017 H1 2018 H1 2019

Note: 1) Based on Pocket Gamer deal information and Rovio estimates Source: Pocket Gamer, Rovio



M&A strategy enables additional growth in Games



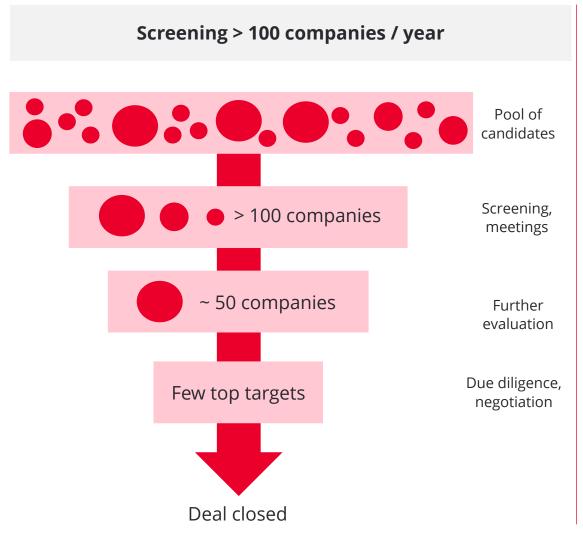


We target mainly mid-size F2P mobile gaming studios

Rovio	Mid-size F2P mobile gaming studios	 Major financial impact Target already has or has potential for Top 100 grossing game Mostly independent studios Rovio supports mainly in UA/growth investments 100% ownership preferred 	Main focus area next 12 months
	Small-size F2P mobile gaming studios	 Promising team Add missing capabilities ("acqui-hiring") Expansion to new genre Requires support from Rovio (e.g. UA, BI, Live Ops, technology) Majority deal preferred 	Secondary focus area next 12 months
Play Ventures	Early stage companies	 Games and game services companies with +€100M potential Also targets beyond F2P mobile e.g. cross-platform Minority deals Additional deal candidates to Rovio in later stages 	Goal to invest in 20–25 companies



We have built a solid M&A pipeline based on well defined investment criteria



Well defined investment criteria

- Focus on F2P mobile gaming
- Long-term value creation potential
- Good strategic fit
- Justified price tag
- Good operational and cultural fit
- Contribution to our financial targets (revenue and EBIT)



PlayRaven

- Acquired by Rovio in November 2018
- Expansion to the 2nd largest mobile gaming genre: strategy games
- Experienced strategy game developers
- First strategy game planned to test launched in December 2019
- Building franchise of strategy games that utilize the same technology platform



Games Summary



Summary of Games growth strategy

Develop F2P mobile games for adult audience with global appeal with main focus in western markets

 $\mathbf{01}$

Strengthen our genre mastery in Puzzle (Casual)

02

Expand and build genre mastery in RPG and Strategy (Mid-Core)

03

Grow existing top Angry Birds games and launch new games

04

Launch New IP games to diversify portfolio

05

Strengthen our knowledge in Al/ML and apply this knowledge to the Game value chain

06

* Disclaimer