

# Entwicklung nativer Cross-plattform Mobile Games

## Most popular Apple App Store categories in June 2014

This statistic shows the most popular categories in Apple's App Store ranked by share of available apps. In June 2014, **Game apps** were the most popular category, with a share of **20.0 percent**.



# Features von Frameworks / Engines

- Physik-Simulation
- Rendering
- 3D Models
- Animation
- Crossplattform
- Audio
- UI
- Partikelsysteme
- etc.

# Frameworks & Engines



UNREAL  
ENGINE

AppGameKit



libGDX



CRYENGINE 3



ShiVa



# Welche Engine soll ich verwenden?

- Was brauche ich?
- Hängt ab von:
  - Teamgröße
  - Teamerfahrung
  - Größe / Komplexität des Spiels
  - Zielplattformen
  - 3rd-Party-Tools (Photoshop, 3dsMax, etc.)
- Engine Features
  - Preis
  - 3D or 2D?
  - Plattformen
  - Programmiersprachen
  - Support, Community
  - Bugs
  - Workflow
  - Extensions / plugins
  - High-level oder Low-Level
  - Vorhandene Spiele

	UE4	Unity	Cry-Engine	Game-Maker	Cocos2d-x	Marmalade	Corona	Project Anarchy
Kosten	5% der Einnahmen ab 3000\$ pro Quartal	Personal edition kostenlos Professional edition 75\$ pro Monat	9,90€ pro Monat	799,99\$ für Mobile Games	Kostenlos MIT-Lizenz	Kostenlose Version, 146-3500\$ jährlich für Entwickler-Support	Kostenloses SDK, 79\$/Jahr für native Bibliotheken, 199\$ pro Jahr für keine Einnahmegrößen	Kostenlos für mobile Plattformen  499\$ für Windows Exporter

	UE4	Unity	Cry-Engine	Game-Maker	Cocos2d-x	Marmalade	Corona	Project Anarchy
Plattformen	PC, XBONE, PS4, iOS, Android	21 Plattformen inkl. wp8, iOS, Android and Web	PC, XBONE, PS4, Wii U, iOS, Android	Windows, Android, iOS, WP8, Playstation, XBONE, Web	WP8, iOS, Android, Web,	Android, iOS, Blackberry, Windows	Android, iOS, WP8	Android, iOS
3D / 2D ?	beides	beides	Fokus auf 3D	2D	2D, etwas 3D	abhängig	2D	Fokus auf 3D



	UE4	Unity	Cry-Engine	Game-Maker	Cocos2d-x	Marmalade	Corona	Project Anarchy
Programmiersprache	C++, Graph Editor	C#, Javascript, Boo	C++, Lua, Graph Editor	Graph Editor, GML	C++, Lua, Javascript	C++	Lua	C++, Lua
Plugins möglich?	Ja, wachsender Asset Store	Ja, sehr großer Asset Store	Vielleicht, kein Asset Store	Ja, asset store	Ja, wenig existierende Plugins	Ja	Nur in enterprise edition	Vielleicht, kein Asset Store
Open source?	Ja	Nein	Nein	Nein	Ja	Nein	Nein	Nein



- Schwierig herauszufinden:
  - Bugs
  - Community
  - Workflow

# Frameworks & Engines

## Frameworks

- cocos2dx



- Marmalade



- Corona



- LibGDX



- Monogame



## Engines

- Unity



- Unreal Engine 4



- Project Anarchy



- GameMaker



- GameSalad



# Economics

22 of the top 25 revenue-generating apps in the App Store are games



# Premium vs Freemium

*MOBILE GAMING EDITION: Who's paying for games?*

**PREMIUM GAMES:**  
Pay-to-play  
(May have free  
version with upgrade)



**FREEMIUM GAMES:**  
Free to play, supported  
by ads or in-app  
purchases



**72%**

of App Store revenue comes from in-app purchases through mobile games

# Economics

All of the top 5 revenue-generating games in the App Store are freemium



## CASUAL GAMERS

Play a few times per month  
to a few times per week



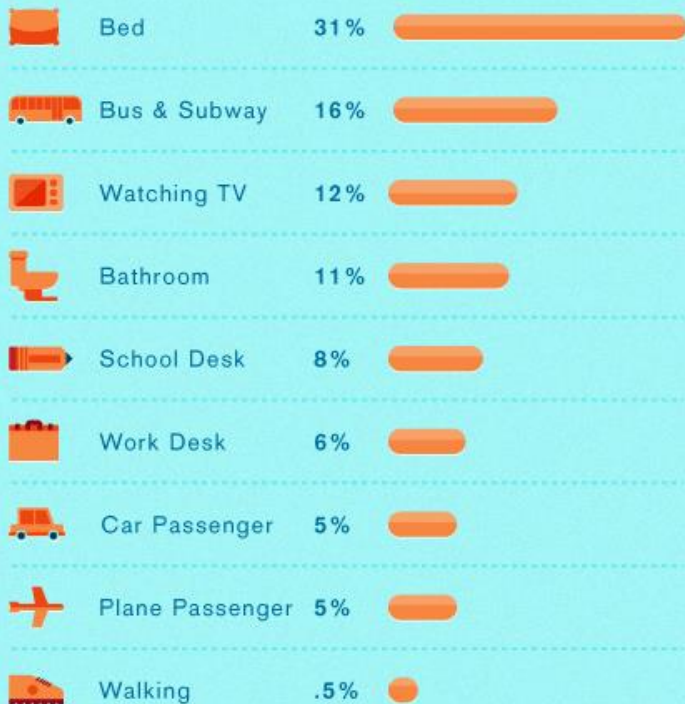
## AVID GAMERS

Play daily to  
multiple times per day

1/2 OF AVID GAMERS HAVE PURCHASED IN-APP



## *They're playing them everywhere...*



## *...All the time.*



52% of gamers play for more than one hour a day.



53% of smartphone owners play daily.





TINY TOWER MADE  
**\$3 MILLION** IN ITS FIRST  
YEAR FROM IN-APP  
PURCHASES ALONE.



ANGRY BIRDS MAKES  
**\$6 MILLION** PER MONTH  
PURELY FROM ADS.