



MAFIA II Postmortem

Jarek Kolář

Designer, 2K Czech

Who am I

- Old dev chap
- Lead designer/producer of Vietcong series
- Gameplay producer of Mafia II
(since 2008 planning and design management)
- Currently without management burden



MAFIA II Postmortem

- (Very) brief overview of development
- Focus on few areas
 - Team
 - Design
 - Tech
- Subjective perspective





Brief overview of development

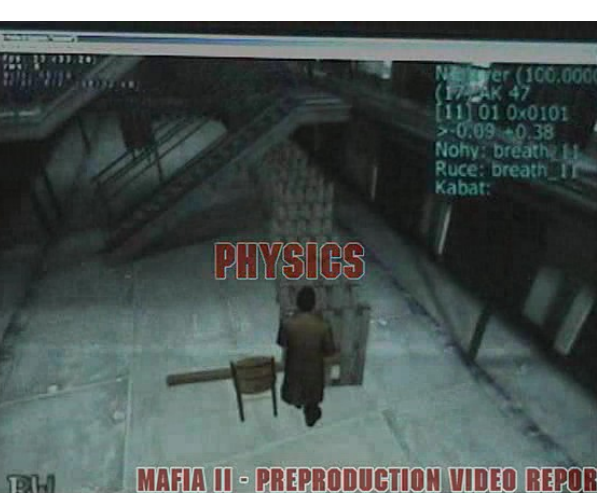
Brief history of M2 development

- 2003 – start writing the story script



Brief history of M2 development

- 2003 – start writing the story script
- 2004 – start of pre-production



Brief history of M2 development

- 2003 – start writing the story script
- 2004 – start of pre-production
- 2005 – next gen decision (PS3, X360)



VS.



Brief history of M2 development

- 2003 – start writing the story script
- 2004 – start of pre-production
- 2005 – next gen decision (PS3, X360)
- 2008 – acquisition by 2K



Brief history of M2 development

- 2003 – start writing the story script
- 2004 – start of pre-production
- 2005 – next gen decision (PS3, X360)
- 2008 – acquisition by 2K
- 2009 – full production



Brief history of M2 development

- 2003 – start writing the story script
- 2004 – start of pre-production
- 2005 – next gen decision (PS3, X360)
- 2008 – acquisition by 2K
- 2009 – full production
- 2010 – beta, release





Hey you!
Not so fast!

Postmortem: Few topics in detail



- ▶ Platform change
- ▶ Design and level design
- ▶ Team expansion

Consequences of platform change



(Original) project goal

- Fast development of the sequel
 - License proven engine
 - Primary for consoles



Imagine

- 2004
- Gameplay prototyping in progress
- Asset production in progress
- The engine company got sold
- Realize that you won't make it for the current generation



Switch to next gen!

- 2005 - decision made
- Consequences
 - Build our own engine (from scratch)
 - Prototype all gameplay (again)
 - Produce all assets (redo/renew)



Increasing detail and quality

- Building next gen tech takes more coders
- AAA game with own engine
 - 1999 - Hidden and Dangerous
 - 2002 - Mafia1
 - 2003 - Vietcong1
 - 2010 - Mafia2

Coders



Building next gen tech takes time

- 2004 – Started

!@

!@#\$

!@#\$%^&*

- 2007/2008 - Playable something
- 2009/2010 - Feature complete

Setting up priorities (not) right

- Main focus on visual aspect
 - Positive for faith and motivation
- Too late
 - Player control and animation
 - Cars and city traffic
 - Load and Save
 - ...

Platform change summary

- It was difficult, but possible
- Now we have
 - More experience
 - Our own proven multiplatform tech

Technology – lessons learned

- Creating new technology takes time
- Be honest with your estimates and plans
- Build your tech foundation right
- Prototyping anyhow, anywhere – but soon
- Tools and pipelines – really save time





Design and level design

Story vs. Gameplay

- Story directs the game
 - Narrative experience
 - Clash with open world
 - Difficult for gameplay
- Story written in isolation
 - Before the game
 - Before the features



Script

- 600 pages
of story
(4 movies)

+generic
speech

The PROSTITUTE gives him a smile.

PROSTITUTE 1
Hi there yourself, handsome. Joe
ain't here right now. He said for
you to meet him for lunch at Freddy's.

Vito is gazing at her.

VITO

I see.

PROSTITUTE 1
(examines Vito
suggestively)
Too bad you were passed out when I
came in. We coulda partied. Maybe
next time, doll. Bye.

Turns around and leaves. Vito mumbles under his breath:

VITO

Well, that was somethin'.

INT. JOE'S APARTMENT - MORNING

Vito is alone in the apartment. His task is clear: he needs
to go to Freddy's Bar at lunchtime. First, he has to get
dressed and grab other stuff. Once dressed and equipped
with the required items, Vito may head out.

EXT. EMPIRE CITY - MORNING

The car he drove to Freddy's Bar yesterday is parked in the
parking lot next to the building. Vito may go to receive

Gameplay preproduction

- Theoretic paper designs
- Great ideas but not proven in-game
- Minimal/no prototyping
- Massively underestimated



High demands on quality

- Goal to make only “perfect” mechanics
- Consequence:
 - Longer development time for features
 - Use of features too complicated
 - Many features cut (as not good enough)



Gameplay feature list

- Main gameplay mechanics
 - Shooting – weapons and AI
 - Driving and city traffic
- Supporting gameplay mechanics
 - City interactions – civilians, shops, flats
 - Melee fight
 - ...

Level design preproduction

- No gameplay mechanics ready
 - Not possible to “play” levels until very late
 - Workarounds with scripting
 - Too difficult to use city for gameplay
- Focus on story and visuals
 - Gameplay “injected” afterwards



Production of playable levels

- Fit into existing geometry and cut-scenes
 - Frustrate artists and animators with changes
 - Uneasy solutions

Document

Level
screenplay

Level
videos



After opening the door the German soldiers spray the partisans with rain of bullets. One man is dead instantly, the old man falls down with serious injury.



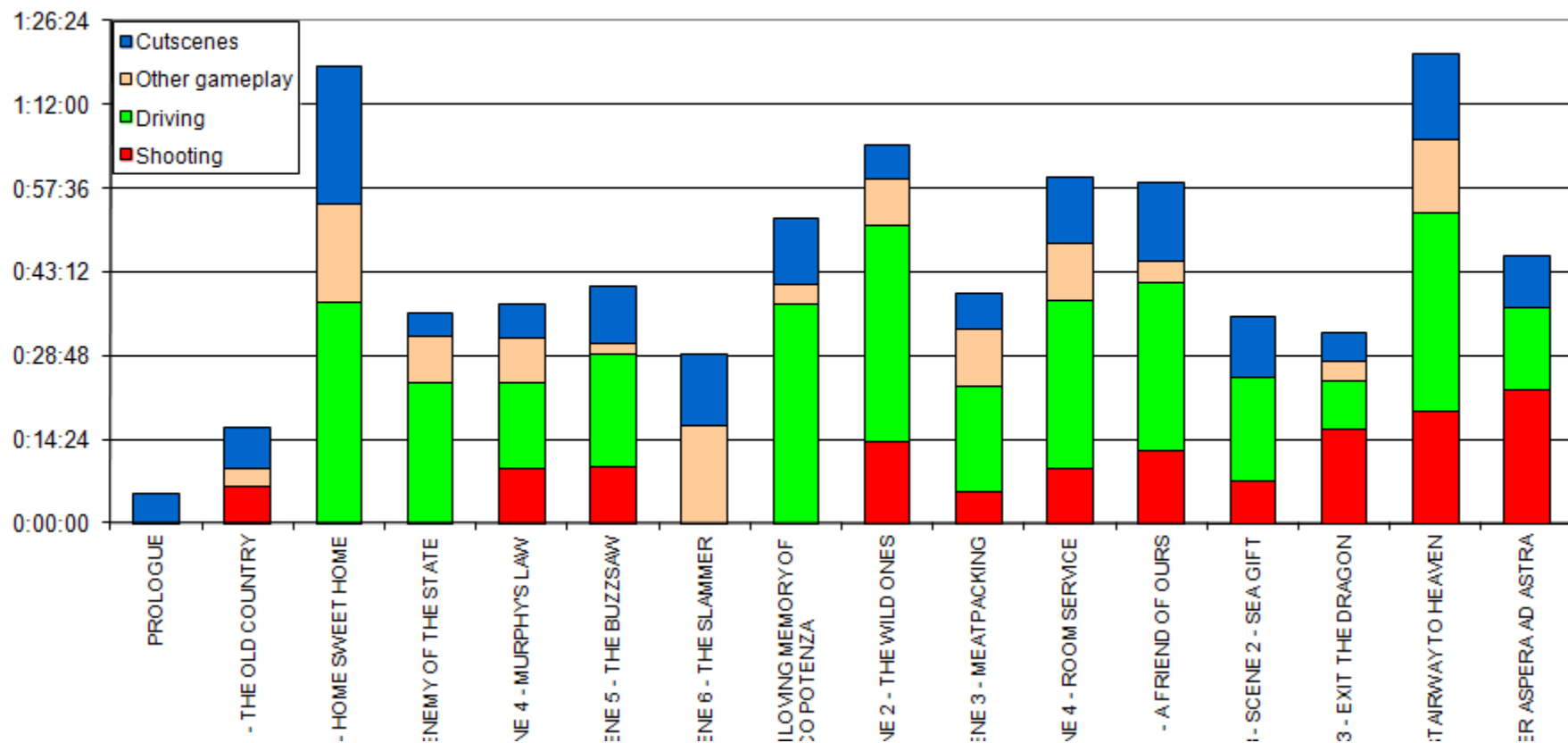
Williams (or Corporal) starts dragging wounded old man from the door. Then he checks his wounds and starts to help him to survive. In the mean time two freedom fighters starts to climb the window (they start only if player is near or watching them).



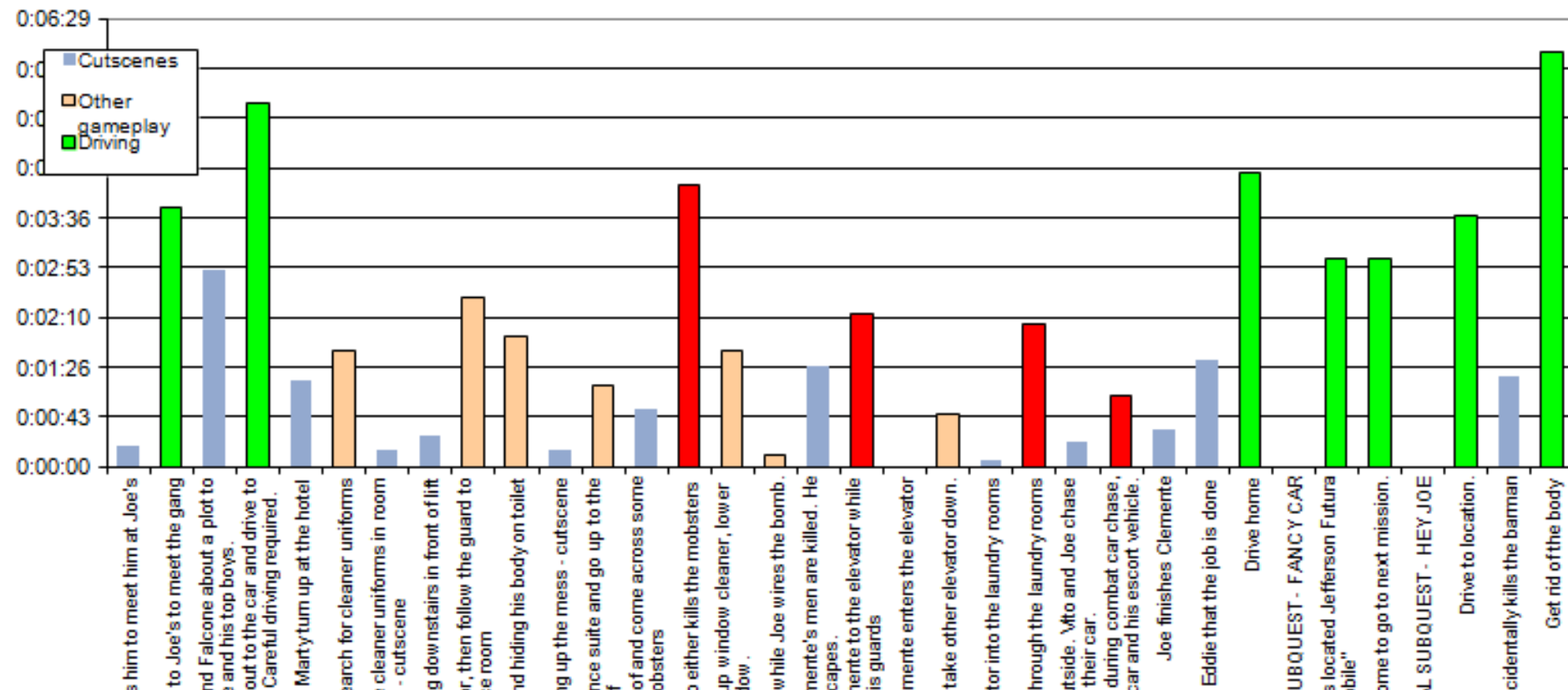
Tweaking every minute

- Designers/producers
- In-house QA
- External QA
- Publishing/External consultants
- User testing – onsite lab
- User testing – external suite

Mafia 2 Gameflow (you must hide details in the "Overview" sheet to see this chart)



ACT 2 - SCENE 4 - ROOM SERVICE



Turning point - DLC

- All features working
- City ready for use for quests
- Classical level design process:
 - Concept - story and gameplay
 - Paper level design
 - Playable prototype (+iterations)
 - Production and finalizing



Design – lessons learned

- Prototype, prototype, prototype
 - Everything playable before level design starts
- Interactivity - systems over scripting
- Have enough mechanics for your game
 - Key gameplay mechanics – high quality
 - Supporting gameplay mechanics - simpler



Level design – lessons learned

- Prototype, prototype, prototype
 - Everything playable before production starts
- Involve artist and animators
 - To help with their expertise
- Level design and story
 - Develop together in synergy
- Experience over gameplay and sto



Expanding the team



Team on start



- Size ~20
- Structured – by disciplines
- Talented, dedicated, hardworking
- No management needed
- Effective

Code

Art

Animation

Design

Next gen → bigger team

- Size ~75
- Structured – by disciplines
- Talented, disconnected
- Management needed
- Ineffective



Game code

Art

Animation

Design

Tech team

Need of middle management

- Lack of industry veterans in CZ
- Leaders
 - Best experts in their fields
 - But just learning how to lead people
- Planners (development managers)
 - New to game development industry

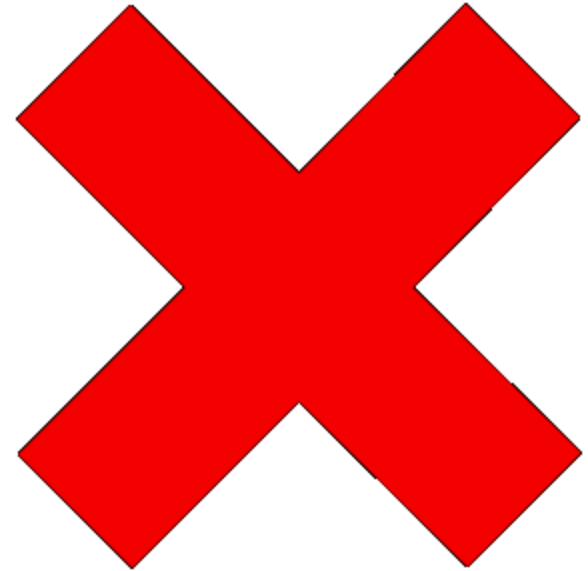
Imagine

- Overwhelmed leaders
 - Don't have time to focus on details
- Helpless planners
 - Struggle with time estimates, order of tasks
- Confused people
 - Don't know what to do



Solutions?

- More leaders
- More planners
- More people
- More meetings
- More emails
- Different planning software



Restructure in 2008

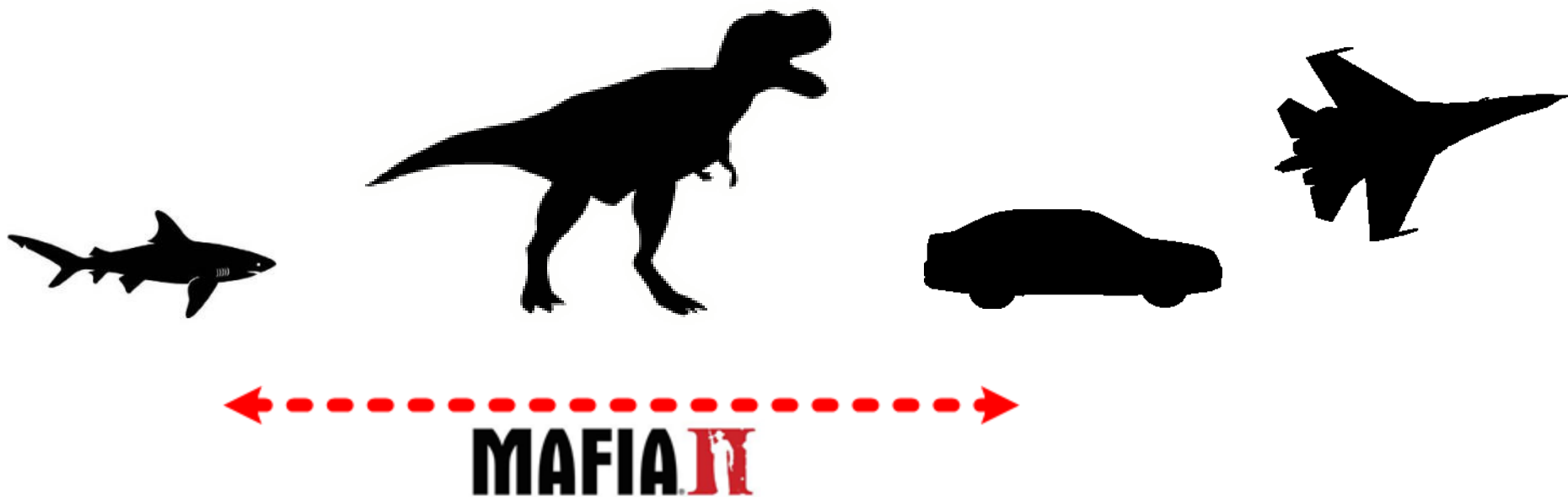
- City team
- Mission team
- AI team
- Player team
- Traffic team
- Art team
- Animations team
- Tech team
- Editor team
- QA

Production team



- Size ~150
- Structured – by topics
- Talented, hardworking, more independent
- More ownership and responsibility
- Planned, managed within mini-teams
- Effective

Evolution of 2K Czech



Expanding team - lessons learned

- Clear plan – goals and priorities
- Clear workflow – how to achieve it
- Build tools to let people work faster
- Armies of people – not so effective
- Balanced autonomous mini-teams



A cinematic photograph of a man in a dark tuxedo and a fedora hat, sitting in the back of a car. He is looking out the window, which is covered in rain droplets. The scene is set at night, with blurred city lights visible through the glass. The man's expression is contemplative, with his hand resting near his chin. The overall mood is mysterious and noir.

Conclusion

Major problems

- Lack of realism, honesty and criticism
 - Too bad for planning and decision making
 - Continual deception
 - “In 6 months it’s finished”
- Lack of experience
 - “If we would know...”

What held the faith

- Mafia1 – historic success
- Theme - organized crime in USA
- Art – realistic, beautiful
- Cinematic – movie like feel

Success on the end!

- New team structure and processes
- Beta, Master – hit on time
- Submission on first attempt
- Sim ship on 3 platforms and 8 languages
- DLC – on time & budget



Looking back on Mafia II

- Project of big scope and ambitions
- Underestimated dev challenges
- Proud of what we achieved
- Many lessons learned



Questions?



jarek.kolar@2kczech.com