l'École de Paris
du management

International digital mega-projects: a fine balancing act

by

■ **Nouredine Abboud** ■

Executive producer, Ubisoft

Overview

Development projects dealing with blockbuster video games are at a crossroads. Either they can play their cards right and focus on quality and creativity in an extremely competitive and dynamic market, or, on the other hand, they can just co-ordinate huge teams of more than one thousand employees in several studios throughout the world for a number of years. Managing these development projects is a fine balancing act between using the latest technologies, encouraging creativity and monitoring risk. Management must accommodate changes in 'games as a service' (GaaS), deal with the steady and critical increase in the size of teams, and also learn the lessons from the coronavirus pandemic.

Report by Sophie Jacolin • Translation by Rachel Marlin

Video games are an area of the creative industry field where numerous elements related to production are taken to their limits. The budgets of the most complex video games are comparable to those of Hollywood blockbusters, but their teams are much larger (and often scattered around the world), and the development times for games are much longer. Because of these factors, the heads of video game companies have to adopt a fine balancing act, but they still have one key advantage: highly motivated employees. Most people who work in this field have been enthusiasts since they were children. I am no exception: when I was a teenager, I had already started coding video games in assembly language. After I graduated from the HEC Business School, I worked in other sectors which I found interesting, but which I knew would be useful to me, particularly if, later on, I worked in video games. I helped on the structured financing of projects for Banque Indosuez (and notably international mega-projects including Eurodisney), and created and subsequently managed the web subsidiary of BETC, an advertising agency. In the end, I created my own video game company, Interactive Revolution, in 2004, before joining Ubisoft in 2006.

Mammoth projects

The video game industry covers a very wide range of activities. It is much too vague to say 'I work in video games'. It is just as vague as saying 'I work in film': are you referring to a film for Hollywood, for a YouTube channel, a telefilm or the recording of a wedding? Video games range from simple, free HTML5 applications on the Internet to international blockbusters, modules for use on mobile phones, relatively well-known console games, and even very technical, strategic games. My talk today focusses on video games which are similar to Hollywood blockbusters, what I call 'mega-projects'. They are characterised by their mammoth scale – there is not much comparable in the IT sector – and their international features.

Broadly speaking, the budget of a complex video game is $200 million, a sum which is split equally between production and advertising. In order to invest such an amount, one either has to come up with an innovation, or rely on a video game series. My two latest games are part of the 'Ghost Recon' series created in 2001, written by the successful novelist Tom Clancy, and they feature US Army Special Forces despatched throughout the world. The 'Ghost Recon' series has a community of fans and consists of about ten games, including the latest two, 'Ghost Recon Wildlands' and 'Ghost Recon Breakpoint' which achieved blockbuster status because they sold more than all the other games put together.

A multitude of talent

Companies in the gaming sector, such as Ubisoft or its rivals (including Electronic Arts, Activision, Sony and Microsoft), involve very large production teams. In our case, we have between 15,000 and 20,000 employees. However, not all projects need large teams: for example, 'Among us', an independent game which has been very successful over the past few weeks, was developed by just three people. Blockbusters, on the other hand, require a large number of people: some 3,000 (all activities combined) worked on 'Ghost Recon Wildlands'. The production team included a core of between 300 and 400 people, but as many as one thousand people worked on it at the height of production.

'Ghost Recon Wildlands' came out in March 2017 and broke sales records in the very exclusive field of 'Triple-A' video games (in other words, blockbuster productions) despite fierce competition from Sony's 'Horizon Zero Dawn' and the Japanese Nintendo's 'The Legend of Zelda : Breath of the Wild'. Even though our game is intended for the Western market, it had better sales in Japan than even the 'home-grown' Nintendo's 'Legend of Zelda' there at launch. Of course, tens of millions of 'Ghost Recon' fans may seem a tiny number compared to 100 or 200 million fans of certain free video games, but these categories are too diverse

to be compared. By definition, a free-access game attracts a great deal more players than games like ours which cost €70 each.

Working together on a global scale

Blockbusters target the international market where there is a relatively dominant Anglo-Saxon influence which is frowned upon by some gamers. In the case of Ubisoft, our international spread is a key feature in our organisation. We have offices in about fifty locations which handle both production and distribution, and our major projects involve our employees around the world.

As manager, I have to co-ordinate teams scattered all over the world. With this in mind, I regard global time zones as more of an advantage than a source of complication because they enable us to optimise production without increasing the pace of work in the form of rotations. For example, when a team finishes its workday, it hands over to a team which is beginning work somewhere else in the world. This set-up requires us to adapt to cultural differences. For example, we have to explain symbols which do not have the same meaning for an employee from a Judeo-Christian background as for an Indian employee. I also have to actively encourage each national team and make them feel proud that they are taking part in a global, group project. These factors are specific to our sector because there are few other activities which exist on such an international scale and have such intricate connections between teams around the world.

Apart from national loyalties, our employees share the same enthusiasm for video games and consequently for a uniform culture which is able to break down barriers. I never experienced anything similar to this in the advertising industry where, for example, cultural characteristics remain important, agencies have their own management methods, and digital tools are not fully used. In comparison, the video game sector is similar to a futuristic Tower of Babel in which all nationalities understand each other and work together.

This international harmony never ceases to amaze me even though my own background is quite international. My father is Algerian and my mother is Hungarian. I was born in ex-Czechoslovakia and moved to France at the age of six. I spend all my holidays in Australia where my wife's family lives. Strangely enough, even though I may find myself faced with cultural divides in my private life, I do not experience this problem in my professional life. Video games is the ultimate example of international appeal.

Geeks United!

Our employees have one thing in common: they are all fascinated by and comfortable with technology. They are all geeks, be they graphic designers, producers, programmers or writers. In other words, it is second nature to them to use social networks and collaborative tools. As a manager, this saves me valuable time.

Mastering technology is essential in the video game sector regardless of one's job. If I were to give one piece of advice to a young person wanting to start out in this sector, it would be to learn the necessary technology and become an expert in it. All the tools necessary to teach oneself are available on the Internet. As far as I am concerned, it is because I bought a book in Eyrolles Bookshop in Paris that I learnt how to code at the age of 12!

When I started out in this field, my aim was to work on games with graphics as exciting as possible. Blockbusters are characterised by their quality, realistic images and attention to detail: a character can explore every nook and cranny of its virtual environment, and scramble to the peaks of mountains or get parachuted there. Even though our teams extremely versatile, they cannot maintain such levels of detail in games for hundreds of hours on end. Procedural software enables us to automate the creation of certain content. It can generate a forest from a tree, or change the lighting of a scene according to the position of the sun. It can even go as far as changing the colours of leaves on trees depending on whether they are north- or south-facing, and decide whether the level of wealth in an imaginary region is sufficient for a bridge to be built there.

The advantage of the long-term

It takes at least two years to make a game, and even that is quite an achievement. On the other hand, a more complex game with more content takes a very long time. 'Ghost Recon Wildlands' required five years of development, followed by two years of adding extra content after its release. 'Cyberpunk 2077', which a rival company will be marketing in a few weeks' time, required eight years of work. Such long periods of time raise questions about employee motivation: will their commitment remain constant as time goes by even though their interests and private life may change? Throughout their careers, employees will have had time to be part of the production of a limited number of mega-projects. If a developer begins his career at the age of thirty, he will have taken part in a maximum of ten, and a minimum of three. When a project in which he has devoted six years of his life peters out, it may be difficult for him to move on from it, especially since on his CV this period might look as if he has not achieved very much. And it is unusual for product marketing managers to stay many years in the same position. We should organise professional transitions. Generally speaking, we ought to monitor people who take part in a project very closely and make sure that they appear on the game's credits, even though they may have stopped working on the game seven years earlier.

A game's success is never certain, even if $200 million have been invested in it. When 'Ghost Recon Breakpoint' came out in October 2019, its reception was disappointing. This may have been because it arrived too soon, just two-and-a-half years after 'Ghost Recon Wildlands'. It is also likely that some gamers had not yet finished exploring all the possibilities in the previous game before the sequel came out. Hopefully, therefore, our 'Ghost Recon Breakpoint' sales will eventually even out in the medium-term. This is one advantage of our market.

When we sold our games on CD-Rom, we put our trust in the reliability of its support facilities, as it was highly unlikely that gamers would take the time to download corrections from the Internet. Today this is common practice. We even sell boxes of games which only contain codes used for downloading. We are able to improve our products over time thanks to online updates, something which Hollywood cannot do if a blockbuster turns out to be a flop. We have 'live' teams who are dedicated to just bringing things up to date. Not only do they fix the bugs and glitches, but they also add content. After we marketed 'Wildlands' and 'Breakpoint', we introduced novelties every month, in the form of corrections, free additional elements, and additions for which one pays. Having worked for one year on this, I can safely say that we have made 'Ghost Recon Breakpoint' the best it can be: in any case, our community of fans and some specialised journalists are delighted with it.

This is the way in which video games become similar to 'games as a service' (GaaS), like a TV series. Because of regular additions of content (for which players may pay additional money to access), hundreds of thousands of gamers are able to keep playing the same original game over a long period of time.

Having bought a video game, some people only spend two hours playing it; the same amount of time as they might spend watching a film. Others spend ten or twenty hours, and others, who are not even complete fanatics, may spend as much as thirty hours over a week-end. Three days after a game comes out, some gamers already start complaining that they have exhausted the content! We think that on average a gamer spends between fifty and one hundred hours initially playing a video game. The idea behind GaaS is that in the long-term, thanks to the detail of the content and additions of content, gamers will play a game for two, three or maybe even four hundred hours and more.

Distancing and management

We rely on proven management techniques which nonetheless are not a guarantee that everything will go as planned! In accordance with the Agile method, we fix short-term objectives of just a few weeks, and take stock when necessary, before envisaging the next step. It would be unrealistic to plan a project from A to Z (including design, pre-production, pre-alpha version, alpha version, and beta version) and to hope proceedings will take place as intended. Things never quite happen in the way which one expects. The Lean approach encourages us to identify teams who do not have enough work and those who have too much, in order to

divide up the workload more efficiently. Finally, the SAFe method enables us to include all company employees in decision-making.

Monitoring email correspondence

As well as these well-known processes, I attach particular importance to monitoring email correspondence. It is not unusual in companies for employees to spend two to three hours every day dealing with unnecessary emails, and it is therefore hardly surprising that they feel pressurised at the end of a day's work. To get around this problem, some people recommend systematically handling each email, whereas others suggest never reading any of them at all, adding that if the email is important enough, it will be sent again! I think it is essential to set out rules in advance which regulate email correspondence. As far as production management is concerned, a system which is based on the premise that emails which are sent will not necessarily be read is doomed to fail. It leads to unnecessary conflict because the senders become frustrated, and it makes people avoid reading information or, at worst, be afraid of it. As a manager, if my aim is to encourage healthy productivity at the least and happiness in the workplace at the best, then it is my responsibility to think carefully about the distribution of messages and the management of information. If I help my employees save two to three hours of their time every day, then we are meeting our targets, even though our methods can be improved.

The coronavirus: accelerating reorganisation

Social distancing encourages confined activity, similar to the conditions when playing video games. The coronavirus pandemic has seen an increase in revenues of all the companies in our sector. At the same time, investment capacity has increased. Some investors whose projects were not suitable to a lockdown environment have turned to investment in video games and streaming. The current, dynamic situation in our market is similar to that associated with the sudden boom in the Internet between 1997 and 1998. Yet neither the nature of our work nor the market organisation has fundamentally changed.

Covid-19 has presented us with an opportunity to experiment with new methods. From a very personal point of view, I think that working remotely offers great freedom. I see no barriers to interaction. However, I do not advocate this across the board: everyone has his or her own reactions with regard to digitising exchanges with others, and companies have different policies in this respect. Microsoft and Twitter announced that they would never force their employees to come back to their offices, whereas other companies are opposed to working remotely. At Ubisoft, we adapt ourselves to our employees and try to find the best balance. I have to add that it was at the height of the lockdown that we produced our best additional content for 'Ghost Recon Breakpoint', and that this series had its greatest sales growth during this period. We have demonstrated our ability to remain motivated in these circumstances and we have enhanced our productivity. All in all, the coronavirus has helped us use methods which have improved our video game manufacturing process.

Discussion

■ ■ ■

Steering our course over the long-term

A speaker: *Is there something intangible between launching a project and the final product, marketed five to eight years later? How do you manage to maintain the initial hopes and expectations with your teams despite the inevitable changes which take place during the years of development?*

Nouredine Abboud: One of the ways of doing it is to start working with quite a small team (30 people for 'Ghost Recon Wildlands', for example) who immerse themselves in the project and 'evangelise' the newcomers. At each new step of the process, the most experienced employees in the project play this 'evangelising' role with regards to the new recruits. Their vision is transmitted through presentations and meetings, and using videos. We also have to double our efforts to get our employees to form a cohesive group.

During project development, production difficulties may make us change our initial idea. This all depends on the amount of disruption along the way we have chosen to take. If we have to drop everything and start again, this is obviously very hard for the teams. If the disruption is more minor, the situation may be easier to handle. From a personal point of view, my aim has always been to preserve the initial project idea. I have rarely had to undertake drastic changes. Nevertheless, I realise that the line between a visionary and a stubborn person may become blurred.

It is reasonable to think that the market may change significantly during a period of development which may last between five and eight years. In reality, the future is not as unpredictable as all that, because the video game sector is made up of a small number of people who share the same cultural references and are subjected to similar development times. Developers and gamers evolve in the same geek subculture. 'Cyberpunk', for example, the product of eight years of development work, was adapted from a role-playing game which many gamers used to play when they were young. I have some idea of the games which are going to be released in the future quite simply because I know the role-playing games we all liked when we were teenagers. Insofar as the market puts up major barriers to entry, we are all in competition with each other and we create our own universe with shared references. Thus, the market is quite homogeneous. This has its disadvantages: some people blame developers for living in a microcosm which limits their range of innovation.

When we launched 'Ghost Recon Wildlands', we had no idea that its theme of drug trafficking would become fashionable five years later. We worked on it with Don Winslow, who specialises in this area and whose novels are regularly adapted for Hollywood films. Hollywood, whose conception times are similar to ours, latched onto this subject at the same time as us!

Speaker: *Unlike Ubisoft, and in an attempt to ensure consistency in its content, the animated film company Pixar employs all of its 500 staff on one site. If you have employees throughout the world, is it because you have such a great need for large teams of people who you cannot find elsewhere in one country? Or is it more a question of being able to capture a variety of talent, or maybe even to give the most repetitive tasks to countries where the salaries are lowest?*

N. A.: The primary concern of an organisation like ours is to tap into various cultural aspects and to benefit from talent in all its various forms. This is one of the reasons why the new version of 'Prince of Persia' was assigned to our Indian teams. Cultural integration still has its limits: it is difficult to insert Asian references in a game featuring American soldiers despatched to South America.

The ability to assign an employee to a type of game or a project which he or she likes, independent of where he or she works, is also a way of motivating people.

None of the countries where we have our offices could give us all the talent we need. We make partnerships with schools in every country where we are present. Every year, video game companies recruit almost all the newly graduated fans who are sufficiently tech-savvy to work in this sector. We are always looking for new people.

The fact that we have teams scattered throughout the world also allows us to have lower labour costs, but this is a marginal consideration. If I could bring together all my employees in one room, I would do so! Of course, there are advantages of working together in one place although resources can be optimised if people work in different time zones and earn different salaries. Even though I may praise the digitisation of various exchanges, I do not make it a hard-and-fast rule: one cannot underestimate the benefits of the social dimension of the workplace. We have to find a happy medium. It would better for me to work geographically close to my talented teams, but this is just not possible.

Pixar's constraints are very different to ours. In a two-hour long animated film, the content has to be perfectly consistent from beginning to end. Video games on the other hand can last one hundred hours and involve hundreds of characters in a 'perimeter' of 250 km². We aim to be as consistent as possible but in fact this is very challenging! Don Winslow, the author of 'Ghost Recon Wildlands' lead scenario, could not write the entire one hundred hours of the game by himself. Many other scriptwriters completed the scriptwriting: we gave some of them the task of writing the scenes located in a specific city, and others, a specific character's lines. There are inconsistencies between the single-player version of 'Ghost Recon Wildlands' and the multi-player version, but we are aware of them. We have put our Bucharest team in charge of the multi-player version, and it was important that this team should develop it independently.

Our American rivals tend to regroup their teams in one place because of the peculiarities of the US market. In the United States, the line between taking part in a project and working for a company is extremely blurred. In other countries, a core team develops the main part of the game and international contributors are called on for additional help. As far as Japanese companies are concerned, they appear to impose national boundaries on themselves which may well curb the economic potential of their games. Ubisoft made a firm decision to have teams dispersed throughout the world – even our company name is similar to the word 'ubiquity'! I see it as an advantage to be able to work with a large number of talented people throughout the world. It is worth noting that we subcontract out less on average compared to our rivals. Our competitors whose production sites are closest together geographically are also those who subcontract out the most throughout the world, from China to Latin America. But where does subcontracting finish and integration into a team begin? And how can one work with a subcontractor for a period as long as eight years?

The secret weapon: deep-rooted motivation and freedom

Speaker: *The budget of a video game is split equally between development and marketing. At what stage are the marketing teams involved in the project?*

N. A.: From the very beginning of the project, the production team inevitably considers marketing aspects. There is perhaps a tendency for them to think that they can do without marketing specialists when evaluating the quality of an idea. It is possible that prior to this, the team asks for help from other teams in charge of market studies, while still not calling on the marketing department. The degree of involvement of the marketing department differs depending on whether one works for a well-known video game series or on a totally new game.

It so happens that my marketing director, creative director, main producer and myself all previously worked in advertising. In our discussions, we naturally use the language of the advertising sector. But this is not the rule in the video games sector. Each company has its own way of organising the involvement of the marketing department in its content: some companies organise committees to approve ideas very early on in the project process; others resort to teams who know the field well.

A young graduate who is starting out in a traditional marketing position in the video game sector will tend to work downstream, in other words, in sales. It is very unlikely that he will take part in any processes upstream regarding the product. The only way to ensure that one will take part quickly in the development of a game is to create one's own company, and this is what I did. If one wants to work with the game content, it is better to be a producer than a product manager.

Speaker: *How do you divide up the work between your teams?*

N. A.: We divide up the tasks between our in-house studios according to their culture and skills. Teams from Paris, Montpellier, Annecy, Bucharest, Kiev, Newcastle and Milan worked on 'Ghost Recon Wildlands'. It so happens that Milan and the north of England have always had expertise in games involving cars. Therefore, I deliberately gave the work on the development of cars to the English and Milan teams. I met with them for a long time. Having developed racing games myself, I can talk for hours about racing game optimisation!

Speaker: *Is it feasible to talk about 'team spirit' when a team consists of 3,000 employees? How do you manage to rally so many people who are scattered throughout the world around a project which will take at least five years to come to fruition?*

N. A.: My answer may appear to be slightly provocative, but we are able to get together so many people because of our religion: gaming. A certain number of us are convinced that our profession can give meaning to life, that our product has a cultural and market value, and that we are lucky enough to be able to take part in this. It would be pretentious if I said that all my staff adhere to these principles but they are still fundamental.

Organisation theories identify different sources of motivation, including the personality of the manager, the perfection of the process, the meaning, and so on. In video games, it is essential for a manager to unite his team together around an ideal. However, I realise that there are limits. I am not a charismatic, all-powerful leader, but when I work with people who are very enthusiastic and are convinced that what they are doing will change the face of video gaming because of their project, I must be able to transmit this enthusiasm by giving out tasks and making teams in certain areas responsible for various aspects of games. We made the Bucharest team entirely responsible for the multi-player content of 'Ghost Recon Wildlands'. This gave them a great sense of pride and was a huge source of motivation. There was no way we wanted to miss out on that!

I am not sure that when shooting a Hollywood film all the people present on set are dedicated to the project. Perhaps their motivation comes primarily from their proximity to the star actors. In video games, we all feel like magicians because we are in contact with the product itself, which we regard as our star. This is why we reach a level of motivation which other sectors perhaps do not.

Clearly, there is no way that I could hope to co-ordinate thousands of people throughout the world without using project management tools. However, the secret ingredient remains deep-rooted motivation coupled with freedom of action.

Speaker: *Are employees still enthusiastic about a product when the series is completely new?*

N. A.: For our employees who are hardened gamers, it is much more exciting to create a video game series than to work on a product which is well-known and already exists, because you can write the story yourself! If you say to a developer that, to use the well-known expression, he will 'have his own IP', in other words, he will create his own Intellectual Property, he will be delighted and think that he is God Almighty!

Speaker: *What is a typical work day for you?*

N. A.: Like any manager, I adapt myself to emergencies or crises and I try to find a balance between the short-term and the strategic vision. One of my obsessions is breaking down walls: when people talk to me about a technical project, I think about the content; when people talk to me about a marketing project, I consider what this involves from a technical point of view; when people talk to me about an HR problem, I wonder whether it is a question of processes. In large teams, at least one person has the job of stepping over these walls.

Speaker: *Apart from your job as executive producer, you are a geek, just like your staff. When one manages important projects, does one have to master the technical aspects?*

N. A.: Even though I am proud of my career, I do not claim that one must have explored as many professional fields as I have (including coding, advertising, finance and entrepreneurship) in order to be successful at my job. However, knowing the ropes in the video game sector is the hallmark of the relationships I have with my teams and it is very useful to me. I am sure that a manager who is more detached from the product could succeed just as well! But I have seen that at Ubisoft, everyone whose job is similar to mine has had a diverse career path. Dan Hay, the executive producer of 'Far Cry', was a graphic designer in video games as well as

a creative manager and producer, but today he emphasizes storytelling a lot. Professional and cultural 'cross-breeding' has its advantages. That is not to say that the people I recruited straight out of school who did not have the time to gain experience in other fields are destined for failure. They will just chart their own course.

An ideology behind video games?

Speaker: *You describe the appeal of video games as a sort of religion. Do you feel any responsibility to transmit values which you regard as universal and which convey the common good, as if you were some sort of crusader? The films which you have described seem to promote Western conquerors. Generally speaking, do you see video games as a means of conveying an ideology?*

N. A.: Let me answer this question on a personal level without speaking on behalf of my company or the video game industry. If you are not familiar with this sector, you might think that a series like 'Ghost Recon' promotes American supremacy. The reality is much more complex. The 'Wildlands" scriptwriter, Don Winslow, who is an expert in the war against drugs, is also a well-known Democrat, and he makes and finances videos (using his own money) which criticise Donald Trump.

I am convinced that video games have fundamental cultural value; if not, I would not have invested such a large part of my life in this sector! But this does not prevent me from putting their importance into perspective. My wife, who works for 'Doctors Without Borders' and was in charge of refugee camps in Darfur, is at pains to remind me about this! As for my father, who lived through the Algerian War as an Algerian, he would laugh if he were told that his son was suspected of conveying Western pseudo-supremacy. It is not because our games feature American soldiers that they promote a warlike and dominating attitude. I have been lucky enough to talk about this with ordinary soldiers and officers in the US Army who are often Republicans. Having made it clear that I am a Democrat sympathiser, we had very lively discussions. The responsibility for the content of a video game is shared within the company. As a simple employee, I deal with the content according to my own ideas and in accordance with my employer's instructions.

We need to remove the mystique surrounding the influence of video games on people's behaviour. At the age of 11, I loved role-playing games: some people thought these games were devil-like activities. Last night, I played a game on Zoom with some of my childhood friends: they have not become dangerous maniacs! In the future, we will look back on the emotions which video games stir up with an air of amusement.

■ Presentation of the speaker ■

Nouredine Abboud: graduated from the HEC business school in Paris, having started his career in finance and music, created and managed the web subsidiary of BETC, an advertising agency. In 2004, he created Interactive Revolution, a gaming and independent consulting studio, before joining Ubisoft. He has produced numerous games, in particular those in the 'Ghost Recon' series of which he is executive producer. He is also involved in the fight against digital divide (for instance in his work with the Liechtenstein Consortium for Digital Capital Creation think-tank).

■ https://www.linkedin.com/in/nouredine-abboud-89b3ab1/

Translation by Rachel Marlin (rjmarlin@gmail.com)