LESSONS FROM PIRACY: HOW PIRATES CAN SAVE THE GAMES INDUSTRY

Joseph Kehoe, Institute of Technology Carlow
email: joseph.kehoe@ITCarlow.ie

KEYWORDS

Methodology

ABSTRACT

Current game development industry practices are based on a hierarchical model much like the Hollywood film industry model. We propose a new model for the games industry based on the innovative governance techniques used by pirates in the 17th century.

INTRODUCTION

The computer game development industry has been continuously changing since its inception. This is witnessed by the number of new game platforms that are in development and this entails new architectures and new ways of interacting with the game. On top of this, and perhaps more importantly, delivery mechanisms have moved from real-world specialist shops to online stores. Revenue streams from games have moved on from those based on outright purchase to subscription, DRM licensing or free-to-play with in-game purchases. All this fragmentation creates problems and opportunities for game developers.

The dominant model of game development is one based on the "Hollywood Model". While there are similarities between game and film production we suggest that a more appropriate model is that of the historical pirate "industry". The historical data on piracy in the 17th century provides guidance for the games industry in terms of company strategies and new development processes. These techniques provided an alternative to the standard hierarchical model that was presumed to be the only way to successfully manage a large skilled crew. In fact, the more democratic methods used by the pirates generally outperformed the standard approach and allowed the pirates to run *one of the most sophisticated and successful criminal organisations in history* Leeson (2008).

It is our thesis that the techniques of pirate governance can be transferred to game development and will outperform the existing model of game development. Indeed we believe that the computer game development market is already heading in this direction.

THE HOLLYWOOD MODEL

Hollywood currently holds a central place in western culture. The Academy Award ceremonies are watched worldwide by an audience of hundreds of millions and its "stars" are feted worldwide. They have fame that game developers can only dream of.

Hollywood deals with stories told through the audio-visual medium. Films have been turned into games and vice versa although not always with success. The urge of game developers to imitate Hollywood appears to be natural. Hollywood is dominated by a small number of large studios and distributers. They control the releases that make it into your local cineplexes. This is the same situation in games with a small number of publishers and large game studios controlling the games we are likely to end up playing.

We can also see the similarities in output. A large number of the bestselling games have little or no original IP with sequels forming a large percentage of each years best selling games (the top ten bestselling games of 2012 were all sequels). These releases tend to rely on special effects and CGI with the story relegated to secondary status.

Both industries are male dominated and hierarchical. Studios exert a large degree of control over their employees and both industries see themselves as special (embodied with an "artistic" ability) while simultaneously wanting to be accepted into the mainstream. Game award ceremonies are copies of film awards. The games industry is already following the Hollywood model. In return for the perceived glamour we lose artistic integrity and independence. Hollywood films and AAA games are made purely for profit. In the Hollywood model Indy developers are locked out, lacking access to funding and distribution. This results in homogeneity of output, a pyramidical pay structure and total studio control.

THE PIRATE MODEL

The true and full history of piracy is too long a story to go into here but important aspects of their culture, I will argue, can be used as the basis of a model for game development. In particular I refer to the 16th and 17th century pirates and buccaneers of the Caribbean and Americas. Depending on your point of view the pirates operating in the Caribbean around the 17th century can

be viewed as *true revolutionaries, quasi-anaschists in an age of absolutism [or] heartless criminals, vicious individuals, who has rejected civilized society in favor of barbarism, greed and bloodlust.* Lane (1998)

What is true is that in an age dominated by a hierarchical stratified society they presented an alternative form of community. They rejected rule by birthright opting instead for an alternative democratic and meritocratic social contract. Their approach to self government was revolutionary at the time and is still considered so today by many people. The pirate approach to managing a campaign is embodied in their use of *Ship's Articles*. A number of these articles survive but the most complete is probably those of Captain Roberts Johnson (2002). Before each voyage or campaign a new set of Ship's Articles was drawn up and agreed. This laid out the command structure of the ship's company, how the profits were to be divided amongst the crew and the crew's rights and duties while on the campaign. At the end of each campaign profits were divided as per the agreed terms and the crew could choose whether to sign up for another voyage or not. These were revolutionary ideas in a time when a crew had few if any rights. Pirate crews had more rights, better conditions and a lower workload than anyone in the Merchant or Royal Navy at that time.

The most revolutionary and important part of the ships articles was the right to vote. These votes could take place at any time, baring during combat. They voted on, amongst other things, whether to engage with a ship and where the ship should sail to next. Leading directly from this was the election of the ships officers from amongst the crew. The officers could be impeached at any time during a campaign. Apart from being the military commander the captain was treated equally. He was given his own cabin but *every man, as the humour takes him, will use the plate and china, intrude into his apartments, swear at him, seize a part of his victuals and drink, if they like it, without his offering to find fault or contest it.* Johnson (2002)

One of the effects of this was the elimination of a separate officer class. In the merchant and military navies at the it was almost unheard of for a common crewman to rise through the ranks to become an officer. There was a distinct lack of hierarchy on a pirate ship and many of the officer posts found on other ships were dispensed with. The posts that were kept were held by crewmen voted most competent by their peers and the powers held by each "officer" were strictly circumscribed. The most important post was that of quartermaster who acted as a counterbalance to the captain.

Profits from a campaign were distributed equitably among the crew by the quartermaster. Crew who were officers got a larger share than general crew but the differences were not that large. Individual crew members could make more money from one pirate campaign than from a lifetime of service in the navy. Commercial ships profits, on the other hand, went to the ships owners whose only interest in the conditions of the sailors was their effect on profits.

Finally pirates operated the first workplace compensation scheme. Crew who were injured during service were given an extra lump sum at the voyages end. Compensation was generous and different amounts were given depending on the severity of the injury.

The results of their novel approach to managing crews manifested itself in a number of ways. Firstly pirates enjoyed much better conditions than their honest compatriots. Sailors had very few rights, endured long hours of dangerous work with little rest and low pay. A voyage that might make the fortune of the ships owner would have no effect on the livelihood of any of its crew, except perhaps the captain. Jumping ship was a common occurrence with some captains even resorting to refusing all shore leave to their crew when they reached port. In fact, many crew did jump ship, often to join pirate ships. The reason mutiny was treated so seriously was because of the very real fear that the crew would no longer accept the unquestioned and harsh authority of the officers. Pirate crews risked hanging but the rewards were such that this was considered an acceptable risk by many sailors.

Merchant ships kept crew numbers to an absolute minimum in order to save costs. This increased the risk to the crew members and lead to a perpetual crunch time amongst the crew. Cordingly (1999) states that pirate crews were much larger so there was less work for each individual to do. Contrast the fact that the navy had to employ press gangs with the fact that pirate ships were oversubscribed.

Pirate crews had what we call "buy-in". They were not hired hands but part owners involved in decision making and profit sharing. They fought harder than merchant crews precisely because they had more at stake. Once a merchant ship was taken its sailors could join the pirates and get a share of the profits from their plundered cargo. A small crew of highly motivated pirates could take over much larger ships of less motivated merchant seamen.

Another side effect of the pirate profit sharing scheme was that profits made by the pirates stayed in the Caribbean while profits made by merchants went back to investors. The profits that pirates made allowed for the development of a vibrant local economy that supported and protected the pirates. These factors led to the success of piracy in the Caribbean and the Americas for many years.

ADAPTING THE PIRATE MODEL

The current approach to game development was put in place for a number of good reasons. First there was the large capital investment required to set up and equip a game studio. Specialist software such as game engines and 3D modelling tools soon cost more than most in-

dividuals (and many companies) could afford. For this reason game studios required substantial injections of capital from outside investment companies who tend to be risk averse.

Second was the dominance of proprietary consoles. Releasing a game on a console required the permission of the console manufacturers who acted as gatekeepers. Developing for a console required the backing of specialised game publishers. These publishers exert, in many cases, complete control over the game studio not the originators of the IP. A developer of commercial software can rely on extra sources of income on top of the sale price of the package such as training and a yearly maintenance fee. They can be fairly sure that most of their existing customer base will buy the next release of their software thus ensuring a growing customer base for each version. A game on the other hand is a one shot sale at a fixed price point with no training or maintenance required and no tie-in of existing customers. Each new original IP game release starts with an installed user base of zero, a risky proposition which helps explain the preponderance of sequels.

When we suggest that the pirate model is followed we are referring to the adoption of the pirate management techniques. The current approach to games development is based on a number of assumptions that are no longer true. Firstly, there is the assumption that a large capital investment is required to set up a game studio. Many of the tools that used to be prohibitively expensive, such as top tier games engines, are now available either at no cost or under terms favourable to start-up companies. Entry into the market place no longer requires large capital investment.

Secondly, distribution channels are opening up. As the grip of the console manufacturers lessen it is becoming easier to get games published. Microsoft, for example, now allows independent games companies to release games on XBox live. Games written in HTML5 can be released and accessed on all platforms. Virtual storefronts such as Steam, Google Play and the App Store are becoming the normal way of delivering games to the public. This combination of easily accessible distribution channels and lower capital costs is reducing the influence of gatekeepers.

Even setting aside these changes criticism of the large game studios is growing. The lack of originality of the games produced by large game studios is bemoaned. Studios prefer to produce sequels rather than original IP. Shareholder owned companies do not make games to express artistic vision but to produce quarterly profits.

Under the pirate model control over the final release and development process would be retained internally. Equal voting rights means that developers have input into all decisions. Key management positions would be filled by ballot ensuring that all levels of management remain part of and answerable to the team. Every developer would get an agreed share of the profits. These companies would be agile, able to change tack at any time and would exist only for an agreed objective. It seems likely that it would also reduce the problem of long working hours due to misjudged schedules or underemployment of developers. This would be a radical departure from current approaches but would keep control over the game completely in-house and under developer control. The risks associated with developing original IP would be outweighed by the potential rewards that would accrue to the development team.

CONCLUSION

The pirate approach to project management has already proven its worth. Running a large sailing ship requires iron discipline, tight teamwork between a variety of highly skilled crewmen, and the ability to make instant command decisions. Pirates proved that a self governing, democratic, approach was not only possible but able to outperform the autocratic hierarchical model.

Game development is similar in that a missed deadline can break a game and many disparate highly skilled people must work together. At present the developers do not see the profits of their work and often cannot make the original IP they want. The current approach to game development has resulted in a lack of original IP being released, high workloads and burnout among computer developers and an unfair sharing of profits. Software development companies can learn much from the pirate approach. Pirates used agile methods similar to those used in today, Beck and Andres (2005), Shore (2007), but they extended their usage to incorporate the entire organisation. It is time to regard pirates as exemplars of what is possible when an industry shakes off its shackles and embraces the ultimate agile charter - the "Ship's Articles".

REFERENCES

K. Beck and C. Andres. *Extreme Programming Explained: Embrace Change*. Addison-Wesley, 2005.

D. Cordingly. *Life among the Pirates: The Romance and the Reality*. Abacus, 1999.

C. C. Johnson. *A General History of the Robberies and Murders of the most notorious Pirates*. Conway Maritime Press, 2002.

K. E. Lane. *Blood and Silver: A History of Piracy in the Caribbean and Central America*. Signal Books, 1998.

P. Leeson. An-arrgh-chy: The law and economics of pirate organisation. *Journal of Political Economy*, 2008.

J. Shore. *The Art of Agile Development*. O'Reilly, 2007.