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KALISTO

THE CHALLENGES OF SHARED CREATIVITY

by

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Overview

The story of Kalisto, a dazzling entrepreneurial success, is that of a company that was created when video games were booming. The company consisted of an exceptionally creative work-force of young enthusiasts, and succeeded in developing a business-like approach and adapting to a very tough economic environment. The creation studio is characterised by major economic issues including an unpredictable and volatile demand, constantly changing technologies and enormous development budgets. In order to manage staff under such circumstances, it is essential to understand the fundamental nature of video games. Kalisto's success was based on the importance that was attached to the mysticism between technology and new ideas and depended on the development of a management system focussed on teamwork and group creativity. In this way, the manufacture of video games can be regarded as a model for dealing with problems concerning management.

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TALK : Nicolas GAUME

I discovered video games in 1979 when I was eight. My father had bought an Apple 2 computer which I used particularly for playing games which were not very sophisticated at that time.

I grew up influenced by TV and movies from Hollywood or Japan, and equally by the school system, from which grew my love of French culture and literature. As a child, I was brought up both on Victor Hugo and Japanese mangas.

My exposure to the world of Apple computers was important. Besides computing and playing games, it was my first contact with business and enterprise : it was well known that Apple was started in a garage by two students.

Kalisto : a spectacular success

I created Kalisto in 1990. I was nineteen years old. I felt that video games could be fertile ground for the creation of a make-believe world of characters and stories, much more so than French television and cinema. Furthermore, having been an amateur computer programmer for the previous eight years, I felt that there was an opportunity to turn the fantasy world of video games into an industry. In an environment where video game companies were primarily distributors and where the creation of video games was a hobby, there was, perhaps, a place for an organised French, European or even global studio in which video games were made.

The first two years of the studio were spent adapting games or working on orders. From 1992 onwards, thanks to financial help from Apple, we began to create our own productions. Success quickly followed, first in the United States (which had always accounted for more than half our sales) and then Japan (which represented one third). France has always been a marginal market for us.

In the next ten years, the company took off : we employed as many as one hundred and fifty people and experienced a growth in yearly net income of 10 to 15 %, with minor debts.

Organisation was a priority especially since we had a team of young people : the average age of employees was twenty at the beginning, and it grew older as the company grew, but was never more than twenty-six. Consequently, we resembled start-ups, and yet we were not a start-up since we had our markets, we made profits and we were known as a front-running creation studio throughout the world.

Fatal stock market flotation

The demise of the company was due to a bad stock market strategy associated with a period of speculation during the Internet bubble.

We launched ourselves on the Stock Exchange in 1999. The video game sector has a technological cycle lasting five years which triggers a search for funds by game developers. Sony was going to market its new console, Microsoft was launching its own console and online games (games where several players, 'multiplayers', are linked by an Internet network) were developing.

In the beginning, we were looking for several million Euros from venture capitalists. However, after many months of discussion with our financial advisers, and recommendations from experts, we decided to float the company on the Stock Exchange. Our aim was to raise tens of millions of Euros to finance a strategy of strong growth devised for this purpose... and which unfortunately proved to be unrealistic.

We raised eight million Euros, and at the same time undertook an investment programme of more than fifty million Euros by launching new production lines and recruiting more than one hundred and fifty new employees. We had to raise the remainder of the money by the following year. In the meantime, our share price was the object of a great deal of speculation. However, the markets then collapsed and we could not carry out the project. This was fatal for the company : it folded in 2002 after a struggle which had lasted eighteen months.

It was a very painful time. Personally, I had run up debts of several million Euros in an attempt to save the company by re-injecting money. It also left many scars. We had been, and myself in particular, the target of a number of newspapers. However, at the beginning of 2003, legal decisions confirmed that I had managed the company lawfully and had abided by the regulations. I was cleared of accusations of dishonesty made by certain people in the media.

Since 2002, I have been working as a consultant for various sized companies creating video games. Half of my work involves communication groups which are reconsidering their strategies regarding new services and products. The other half involves working for video game companies that have asked me to work on the organisation and management of their creative processes.

The video game sector

There is not a great deal of information about the video game sector. Today, the average age of players is twenty-nine. 40 % of players are women. There are just as many children as there always were who start playing at the age of twelve or fifteen, and many continue to play as they grow up. The market is expanding. Now more than three hundred million play regularly. The most serious players play more than about ten hours per week ; those who play occasionally, between two and five hours, and the great majority, less than an hour a week. As a reference, the average time spent in front of a television set is approximately three hours per day in France.

The sector carries huge economic weight : the global market represents just under thirty billion Euros, as opposed to fifteen billion for the cinema box office and about thirty billion for music. The largest independent video game company, Electronic Arts, has a turnover of more than three billion dollars and Ubisoft, one of the largest French companies, generates more than five hundred million Euros with two thousand three hundred employees, most of whom are on the creation side. For Sony, which is involved in cinema, music and mass electronics, video games account for more than half its profits ! Microsoft considers video games to be one of its major strategic investment platforms.

We still know relatively little about video games in spite of their economic importance. Game creators do not really understand why we play. By observing players, however, we can find some answers.

Re-enchantment and pragmatism

This generation to which I belong grew up with television, the telephone and the Internet, in other words, steeped in an almost intrusive environment of technology and communication. It was completely new in comparison to previous generations. Things are done much faster. Relationships with others are created and built differently : it is possible not to know one's neighbours very well, but one may have very close friends on the other side of the planet as a result of the email network. The resulting social link is different : one chooses the people with whom one wants to have relationships ; the link is almost tribal and revolves around common centres of interest. It constitutes a real challenge for our society.

This generation also grew up in an environment of pessimism which in the United States and Europe promoted a vision of the world which is both cynical and naïve. This generation has a great love of ideals and justice, and is also the Aids generation, the unemployment generation and the generation of demonised globalisation. In my opinion as someone who is involved, video games respond to the dual need for re-enchantment and adventure, like *Harry Potter*, Tolkien,

Spielberg, Méliès or Jules Verne, which have much in common with video games. It is a global sector since it does not have a national identity, unlike the cinema or literature.

The United States, Japan and England are today the three major game producers. They represent the rich, creative sources which offer a variety of games with as much choice as the audio-visual world, ranging from leisure games based on testing reflexes and violence, to dream-like adventures which encourage thought, ask questions, make one dream and produce various emotions ...

Video games invite us to look deeper into unusual marriages such as the re-enchantment of the world and a pragmatic approach to the analysis of one's experiences ; apathy and commitment ; and cynicism and naïveté. As opposed to television, video games provide the means to control, react, and to experience. They suggest new, reiterated and empirical means of learning : one discusses one's problems with others via email, one looks at them from different angles and one analyses them... Games are devised around challenges or undertakings, with scope for experimentation that undoubtedly opens new paths for educational experiences.

The prehistory of video games

The creative processes involved in console games are complex and may take up to two or three years to develop. Their life span, however, is extremely short. Limited amount of shelf-space in shops which stock them necessitates a rapid turnover. On average, a game has a shelf-life of three months, and six or nine months for the more successful games or occasionally more than a year. Games which sell well often give rise to sequels or new versions.

From an enthusiastic one-man band to industrialisation

Nowadays, in order to produce a console game, one needs on average a team of fifty to one hundred people and sometimes up to two hundred people. Twenty years ago, just two or three people working part-time for three months were needed. This was the 'prehistory' of video games. The market at that time was small and targeted teenagers who were mad about computers. Just like in the early days of cinema when the same person made and directed films, the industry was made up of passionate technophiles.

Considerable progress in picture quality and the ability to express considerable progress in picture quality and the possibilities of communication which this has created have led to major changes. Up to 1995, teams were made up principally of programmers. With new techniques possible in game machines (such as calculation capacity, image quality, capacity to store information), teams covering a multitude of talents were composed of people, mainly those who made comic strips, then animators and finally from those involved in making films as well as script-writers and literary sources. Finally, it was only in 2002 or 2003 when we really started to think hard about the nature of video games.

The nature of video games : existential experience and virtuosity ?

Video games rely on two driving forces. Essentially they are an interactive experience, perhaps even an existential experience. In the cinema, one is concerned with whether the screen actors have something in common with us, and one can empathise with the situations which they depict. In video games, it is no longer a case of identifying oneself with a character, but of projecting oneself in one's alter ego on the screen. The player becomes the character with his fantasies and desires. Our role as creators is to let the player express himself and exist in a world which we have devised for him.

The personal search for mastery of an activity is another driving force. It is linked to the speed of life which this generations has. It takes ten years to play a piano well ; in only ten minutes, certain games give you the same 'buzz' as composing music. It takes five years to learn to ski

properly ; one can feel the same sensation of speed in a video game in a shorter space of time than good skiers do in five years.

It is a dream-like environment which enables one to involve oneself in surroundings which are unfamiliar : one can be a builder of nations or the leader of an empire. The best-selling game, *SimCity*, gives the player the opportunity to be mayor of a town. At times such as these, where a citizen's commitment to public life is questioned, millions of players enjoy managing a local authority.

Some games go further by inviting players to create their own additions to a new version of the universe, the cinema, comic strips, literature or daily life. Imagine being able to reinvent the works of Lewis Carroll or Jules Verne, for example. The player enjoys himself, and he is made to think ; he also will start to become a creator.

A break in management

There are three important characteristics which distinguish management methods in the creative process from traditional industrial environments.

Three structural characteristics

Firstly, our consumers are extremely capricious in a market which has a large offer. The client is frightened of being manipulated and is particularly critical of the product and the experiences which he undergoes during the game. He reacts suspiciously and produces sharply contrasting reactions with regards to the offer : either he likes the game or he does not, and he decides very quickly. Demand may be quite unpredictable in an environment where production processes are complex : budgets for the creation of console games (which are very popular with multi-players) range today from five to twenty million Euros. On top of this, there is a similar budget for publishing and marketing. Once the game has been created, it is launched into a very competitive market. Several thousand games are produced every year. Less than two hundred are really profitable ; ten may sell very well and between 10 and 20 % of all games account for 80 to 90 % of sales.

Secondly, video games are a software industry. The culture is fundamentally technological. A creation studio is very similar to a computing R&D or telecommunications laboratory. The aim of technicians and engineers is to generate and create new areas of interest. They are the main alchemists in a creation chain devised by those in the creative department and upon whom they are dependent for initiatives while being creative themselves.

Finally, we are steeped in the creation process and therefore we encounter the same problems as in literature, art, music or the cinema. Creators draw from their own experiences for a sensitivity which is often exacerbated. This is naturally not easily compatible either with collective creative processes or with the constraints of a organisation built around enormous financial issues. It is a daily challenge to management.

A technological environment in a state of flux

The electronic industry has technological cycles which last five years and which correspond to the life of game consoles and the development of PCs. Within a cycle, there is a short lull during which producers can develop two or three generations of games.

These technological advances are accompanied by progress in image quality, sound, calculation capacity and storage capacity. If one takes multi-player games for example, the great majority of games between 1998 and 1999 were for single players. Between 2000 and 2002, it was possible for sixteen or thirty-two people to play simultaneously. Today, the major Korean, Chinese or American manufacturers allow several hundred thousand enthusiasts to share their experiences in multi-player games.

With each new machine, the technological means exist to open up creative fields. Engineers are very good technicians and are also game enthusiasts, but they do not have very strong communication skills. Managers constantly have to make them aware of interactive mechanics, by asking them to be the pioneer creators and to communicate. It is essential for studios to be open to ideas and to introduce engineers to different forms of creation. To make them aware of what they were dealing with, I suggested that I introduce some of my colleagues to the cinema, to show them the classic films of Renoir or Eisenstein, since the only cinema they knew was Darth Vader and Star Trek. Taking computer programmers to a museum and asking art historians to teach them to analyse a painting may give rise to fascinating changes in thought and behaviour.

Today, this exercise is not necessary because after the inexperienced creators comes a generation which is more adult, more mature and more qualified. Technical teams are now made up equally of self-taught individuals, engineers from the top schools or doctors and, in the near future, students who trained in specialised schools such as the ENJIM, a school exclusively for games opened this year in Angoulême by the Prime Minister.

The organisation of creative work which is constantly being renewed

Creators also have the challenge of integrating people coming from different sectors (comic strips, cartoons or cinema) into the original teams of technicians. There is a huge amount of work to be done so that these different groups of people understand each other.

In France particularly, there is also a great deal of work to be done to dispel the myth that there is a single author involved in the development of games. We are creators but the author of the game is in fact a group of people. In the world of the cinema and television, creation is the result of teams pooling multiple talents. In video games, there is the additional element of interaction with technology : creation is shaped by the fusion of technological opportunities and the possibilities which they open up in a repetitive process which brings together the creative team and the engineers. The transition is then made from a creation which is the sum of individual contributions to a creation which becomes a real entity : in mathematical language, from a partition to a set.

In film-making, everybody's part is clearly defined. Even though each person interacts with others during filming, there are nevertheless quite clearly defined roles such as director, scriptwriter, cinematographer, and actor. In the world of video games, a computer graphics designer or a programmer sees his role changed with each production cycle. These roles are defined not so much by their precise tasks and their involvement in the process of the development of the game, as by their skills and their contribution to the dynamics of the team. Understanding each person's skills and bringing them together in the form of a 'group author' is another challenge to management.

Pre-production : learning to work together

This challenge has important implications. In a new games project, between one third and one half of the budget and the production time is taken up by learning to work with others rather than pure creation.

Creation techniques develop with a better understanding of the nature of video games, but the majority of video game companies still have their profitability moderated by the complexity of the pre-production phase. This is even more the case because in keeping with the culture of the software industry, and in view of the importance of the group, we work with teams whose members rarely change. By contrast with film-making, we do not create a new team between productions because we need to keep continuity. We have noticed that we need roughly three production cycles, and it takes between six and nine years to create closely-knit teams who work together efficiently. It is a financial issue for managers to work towards such a goal in a market which changes so rapidly.

In management terms, organising the structure of a creative team is like organising the dialogue, bringing specialists together for the purpose of collective creation, assessing the possibilities, arranging meetings, and so on. Today, during the process of selection and recruitment of creative talents, one tends not to favour the most creative people, but those who are most sociable.

In the pre-production phase, the manager has to build the foundations for a project without knowing at whether the project will become viable. One has to both build a team based on a strong strategy while keeping the position under review. The manager has to be aware of the difficulties, be prepared to put pressure on the team, but also to be flexible, and strive for innovation. It is a schizophrenic exercise : pre-production is a period where one can take one's time, but it is also a time for action. To make this phase successful, there needs to be constant movement between action and thought.

Production : defining the game negatively

The production phase comes next. It is similar to the production of a cartoon. 80 % of the team works on the image. They create models in 3-D that will constitute the geography of the environment, the scenery, the objects, the textures, the lights, and so on.

Above all, we build technologies which will display these images and manage the interaction between the player and the environment. The construction of the game cycle is the essential product of this period. This cycle is made up of an interactive challenge, followed by testing of the player and consequences of his action which he has to assume. It makes the heart of the experience, which is based on a script and he expresses himself using the layout of the levels– the level design –, and the learning curve which on offers the player.

For the co-ordinator of a creation team, this is the phase when it is necessary to decide, as quickly as possible, what the game is not about and to define the game later on. This negative definition is easier for the team manager to manage. One establishes a general objective, one puts the technicians to work so that they can open up the field to other possibilities, and one then involves the creative team in order to try out, test and isolate the promising interactive paths.

The choices concern artistic aspects, the elements and characters in the game, the interface, the layout of the scenes, the mechanics of learning and the ergonomics which should enable the player to enjoy the experience.

Two types of game : slides and sandpits

There are two types of game. Today the majority of games falls into the category called “slides”. These games have a beginning and an end, and quite a large variety of possible, predefined and structured paths. There is a character and a universe : the player is allowed to assume the character, take control of his adventure and create his own path.

The Dark Earth example

Dark Earth is this type of game. We started work on it in 1994 and it was marketed in 1997. It takes place in a recent post-apocalypse universe. Having endured an avalanche of meteorites, Earth is covered with a thick layer of clouds, pierced intermittently with huge columns of light. In these areas, the few, rare survivors have come together and created large cities, the ‘Stalites’, in which the well-off people from the high city and the low city people from the shadows live together. The Sun-God is both a venerated being and the source of survival and energy.

The player portrays a young hero, a soldier who is about twenty years old and is from a rich family. He is carefree and, like the player, does not know his town very well. During an important meeting of the ‘Advocates’ (the leaders of the city), an attack of mysterious creatures takes place and our hero, who was on guard duty by the city walls, is contaminated with a strange

substance. He is affected by a disease which gradually disfigures him. His race against the clock then begins. He is faced with choices and has to make investigations to discover the truth about the universe in which he lives, and to save the city and his life.

We wanted to create a fantasy universe which nevertheless was linked to topical questions about Aids, citizenship, and ignorance about the world. The player has several choices during his journey. One choice is that he can favour force at the risk of developing evil which will wear him down, and ultimately he will understand what it is all about and will save the city, but will end up as an animal in the low city. Alternatively, he can just as easily end the game and save the city by regaining his humanity. The end result depends on the behaviour he chooses to adopt. In the game, one realises that shadows are not necessarily evil and that light is not necessarily good.

The sole aim of this game is entertainment even though it might be said of the game that it might make people stop and think a little more. We were also intent on using technology to create a universe inspired by Jules Verne – brass, salvaged materials, steam... –, or Méliès, and our European culture. We wanted to reproduce the image of huge cathedrals built in the middle of houses made of mud and straw.

To create this game, we built a mythical universe with a complex historical, social and geographical environment. This took us a year-and-a-half. At the same time, various technicians were working on the shadow and the light and the image-display techniques, because this was a fundamental part of the universe which we wanted to create. To help us with this, we called upon engineers from INRIA (Institut national de recherche en informatique et en automatique), a research laboratory specialising in the field of computer-generated images. We employed people from the cartoon world to construct our universe. We also worked extensively on the script with people from the world of cinema to develop the characters, and with a publishing house, in which Kalisto had invested, in order to write a history and geography storybook about this world.

Steven Spielberg wanted to buy the film rights at the beginning of 1997. In the end, it was Ridley Scott who acquired them. I was just twenty-five years old : it was an extraordinary time for me. It was true recognition of the work of the whole team. It was also proof that Hollywood was looking for something which we had. Perhaps we had something unusual and offered the promise of future ideas and new methods of creativity.

Sandpits : a forum for management

In the second category, the “sandpits”, one supplies objects, such as a bucket and a spade (to continue the metaphor), and although we create the games, it is the player who creates his own adventure. This type of game has a real future. The most well-known game of this sort, the Sims, introduces the video game world to women : 80 % of its players are female. It is amazingly imaginative : it is very similar to American sitcoms and enables the players to create characters which are the result of their fantasies and fears and makes them change and experience different situations.

Not only is it interesting on a sociological level, but also in terms of creativity. This type of game, once it is available online where several hundred thousand people can play it simultaneously, allows creativity to enter into the arena of improvisation and pooling creative ideas. Players can construct the game themselves and the creator who is following them online can suggest investigations, objects, and characters to try to direct them towards new adventures. After pre-production and production, these games introduce a new phase of permanent post-production in the creation process. In games which were devised some time ago, such as Everquest (six years ago), but which have more than one hundred and fifty thousand players, the creator intervenes online in order to accompany and stimulate the player.

These games open up interesting possibilities for the management of the creative process, since one can instantly appreciate the reactions of the players and the way in which they play. They also raise interesting debates about the identity of brands, intellectual property and the

organisation of value chains, since the creators can no longer construct a closed product of which they are the sole owners, but accompany a permanent creation process, installing an open system which is progressively taken away from them. This is just an example of how video games become a forum for new problems in the management of creation.

DISCUSSION

The difficulties arising from multi-authorship

Question : *In France, where the idea of royalties is well established and is generally assumed to revert to a single author, how does the notion of multi-authorship find acceptance ?*

Nicolas Gaume : The problem is not about technical transposition of the royalties as we know them in France but appreciating the whole environment of video games. The royalties are different from those in the ordinary media and therefore require a different approach. Rights for video games still have to be developed. We must not forget the nature of our profession. We are first and foremost software makers. We make products composed of programme lines. In this area, we are legally similar to computer service companies or electronic R&D laboratories. But video games are also a creative product composed of sound and images. However, the essential, intangible basis of our work lies in what can be called the “playability”. This is the heart of game creation. It is not owned by any one participant but by the group all as a whole and by the structure which allows them to build their collective group.

We have to consider the legal and financial environment of video games in France. This is the case both for intellectual property as well as for the means of financing creation studios. In video games, we do not have the tangible reference documents unlike that which exists for royalties, the labour laws, the methods of bank financing. It is extremely difficult for our companies to keep going in this sort of environment. If Kalisto had not been floated on the Stock Exchange, it would undoubtedly still exist ; and if it had been floated on a stock exchange in an Anglo-Saxon country, then it would also still be here. Today, if Ubisoft prefers to create jobs in Montreal or Shanghai rather than in France, it is because the environment there is more suitable on a creative, financial and social level.

Q. : *A century ago, film-making was a collective process in which the director was a technician like everybody else. Since that time, he has become the film-maker. In video games, are there any signs of something similar happening ?*

N. G. : Today, the team is definitely the author. Of course, some people make a creative contribution which is seen to be pre-eminent. Others have a regulatory role which is just as important. This is all linked to the state of technology and our understanding of the nature of video games. The greater the capacity of the machines, the more specialised the programming, and the more one develops production tools which divide up the creative work into precise tasks. In this way, one structures production chains. This helps to define the roles and responsibilities of everyone, and therefore to clarify every person’s contributions. In this way, it is possible for royalties to be evenly distributed. I am sure that one day royalties will feature in video games. This should happen in video games just as it does in other creative sectors. It is essential that the true nature of video games and their particularities be taken into account with regards other creative sectors. Today, this sort of work is not done enough in France.

Talent and rigour

Q. : *The book Société de consolation (by Jérémie Lefebvre, pub. Sens et Tonka, 2000) has a particular vision of the world of video game creation, namely that of young people who are only interested in playing, are often alone and are immature. The success of your company is that of an unlikely alliance between detective novels and players, between people who are meticulous and those who are visionaries. How can one deal with important issues with people who are so immature ?*

N. G. : Let's not talk about the part of this book which is specifically concerned with the criticism of Ubisoft which seems to me to be unfounded.

The immaturity you mention is unquestionably linked to the young age of our sector.

When video games first emerged, everyone, creators and publishers alike, worked intuitively in small teams. This worked very well in a market where video games were a hobby.

Due to increasing pressure from the production of images and the ever increasing demands of players and the general public, the creation studios had to launch both an important recruitment drive and to establish more complex and more structured processes, particularly after 1995.

As a result, the culture of these companies changed dramatically. This process was not a smooth one. Many successful companies created in the 1980s (for example in France, Lankhor, Loriciels, Delphine) disappeared. Others, such as Kalisto or Ubisoft, which tried to rely on more structured organisations, developed. Between 1992/93 and 1997/98, teams in charge of developing games for consoles grew in number from about ten people to many more people. As a result, talented people were needed which because of the urgency of the situation, all those who were enthusiasts were recruited. They did not always have proven talent, but they all had a capacity to learn and were good communicators. Our strategy was to be a creative team and this proved to be a key factor in our success during these years.

The marked increase in the sizes of teams and the increased structures in organisations created problems of adaptation. The introduction of groups of independent teenage creators to adult organisations was not smooth.

However, today, many teams reconcile enthusiasm with professional rigour. The creative aspect of video games can only be organised around a permanent team, in other words, employees in R&D, whose creativity is fundamentally personal, but which relies a great deal more on group work and communication. The differences between people are almost more important than the people themselves. For the people from the world of cinema or cartoons, this is difficult to accept, since it would be akin to admitting that a piece of oneself has been appropriated by another person who will assimilate it in accordance with his own culture, transmit it to another person and so on.

Changes in our ways of working also rely more and more on initiatives from the academic world. The Prime Minister launched a national school of video games designed on the FEMIS (École nationale supérieure des métiers de l'image et du son : National School for the professions of image and sound) model. Schools and universities are starting to work on this subject : for example in the University of Edinburgh, Carnegie Mellon created a Chair in game creation.

Q. : *The talent of young people for video games goes hand in hand with a lack of interest in literature, culture and school, which are seen as much more boring. This makes your personal story a success from another era ...*

N. G. : I do not think that games lead to the assimilation of a certain culture. Personally, I spent ages playing video games, and yet Victor Hugo is still my favourite author. In secondary school, I studied Latin and Greek for seven years because I was fascinated by mythology which I encountered in video games. Today, youth literature is growing considerably and I think that this generation can be both idealistic dreamers as well as pragmatists.

A system of innovative management

Q. : *What managerial measures did you put in place ?*

N. G. : Our system was aimed more at managing an environment than individuals. We carried out an identification study not of job titles, but professions, such as the image profession, the writing profession, the programming profession, and so on. Then, with the help of a consultant, Bob Aubrey, who played a key role in the development and management of the company's human resources, we supported these talents so that, collectively and by consensus, those concerned pin-point the key skills of their profession explaining at the same time their definition of 'competent', 'satisfactory', 'excellent', etc. These measures were not radically new but rang a

bell in the video game world where they encouraged individuals to communicate better and thereby strengthen the teams.

Financial remuneration, often seen in companies as the main sign of recognition and encouragement, was related to team production performances in our company, and was collectively managed in a consensus which was characterised by systematic personal assessments, on a hierarchical level as well as judgment by one's pairs. Every year, people in a particular profession made a self-assessment with the help of their mentor, assessing each other and assessing their mentor. This may appear utopian, but it worked.

It was up to management to help each individual define his skills and determine the themes which he wanted to develop. We invested 15 % of the total salary bill in training programmes, notably through the 'Kalisto university' which provided a base for advanced, individual training collectively.

Every three months, in a plenary meeting in a lecture theatre, we took stock of the progress of each project by highlighting its successes and also its unsatisfactory progress or difficulties.

The Kalisto inheritance

Q. : *Has IT learnt anything from your methods of organisation ?*

N. G. : That depends on the individual company, but we have quite close links with this sector. Before Apple was created, its two founders created *Break Out*, the classic Atari game. At the same time, Steve Case launched a system of network games called ... AOL. And the world leader in video games today, Electronic Arts, was created by five former Apple employees.

The Pixar company model is very similar to ours : constant technological surveillance of computer-generated images, creativity which is more collective than individual, and a profit-share as well as a guaranteed salary even if there are not many sales. One can also learn a great deal from failure. Their management system is also very similar to ours : team profit-share in the studio, an enormous training budget, and an in-house university.

Q. : *The death of Kalisto was mainly caused by financial factors : what happened to its assets ?*

N. G. : Many of our projects were bought out by other companies and the teams followed them. Today, a large majority of our employees still work in the sector, but relatively few in France. The majority are in Montreal, where very attractive projects were put in place to develop the video game industry. The others are in Shanghai, London and Tokyo. During the last project I did, I saw more than a hundred of our former employees who were working for UbiSoft.

Q. : *Have you any plans for a new company ?*

N. G. : As well as Kalisto, I also had other entrepreneurial experiences. In 1994, I took part in the development of one of the first French *web agencies* with two associates. We sold it in 1998. Also in 1994, I launched a publishing company for children's books in China, a country I love. I sold it in 1999. Finally between 1999 and 2000, I took part in the development of a wine-broking business on the Internet with the *Crédit Agricole* (bank). I like undertaking new projects.

During the period when Kalisto was having difficulties, nine of my family died. It was a very difficult time for me. The closure of the company, which I had taken twelve years to build, was painful enough, especially since we had accomplished a great deal. We had achieved professional recognition, the best partnerships, distribution agreements for our products which were in the process of being developed, and it was taken away from us because we had agreed to follow a risky financial strategy which resulted in a heavy financial burden for which I accept the responsibility. It is very hard to close the door on this period when I was not able to be close to my family because I was fighting for my company and its shareholders. It was harder to come to terms with the realisation, in retrospect, that many of the shareholders were not very interested in our struggle during this time. Many of them had bought shares as if they were buying a lottery ticket which was going to win every time, without really knowing the overall situation and ours in particular. There were precious few shareholders who came to our general meetings in 2001 and 2002.

It was also difficult since I was the target of anger – both legitimate and shared – of small shareholders who had lost their money. I would have preferred that each person – the bankers, the experts, the authorities, the financiers, the journalists and the shareholders – had accepted their part of the responsibility for this disaster. The new economy *à la française* certainly went too far, but one should put into perspective the inflated egos which one saw through the distorting lens of the media and which were lambasted after the bubble burst. Personally, I saw my name splashed in the press. It did not change my way of life. I never sold a Kalisto share for personal gain, whereas the press described me as a multimillionaire. When the problems surfaced, it was rich pickings for the vultures. It seems to be a ritual course of action in France to hound the person when he is down, having apparently accumulated success and money.

I spent the first year of my life ‘after-Kalisto’ back with my family trying to re-establish a balanced family life. My wife, who married a virtual multimillionaire, later found her husband with debts amounting to millions, our bank accounts seized and bailiffs in our home. She was an essential element in my survival and my rehabilitation. My former clients and rivals also helped me.

I had to recover from the liquidation of the company and the attention of the media. Once the favourable legal decisions were announced, I debated whether to stay or go. Like many other entrepreneurs, the business relationships which I had in France had never been straightforward because of the negative image which enterprise and its success have here, since they are too systematically associated with dishonesty. This is a real malaise in our society.

I feel that our country is embittered, old, and at the end of its life. I do not like this idea and I think that France has no future if young entrepreneurs leave. I decided not to leave because I want my son to be French, but I question this decision every day. Today, I am writing a book about this story. Afterwards, I think I will leave France to create a new company. First of all, I would like to develop an activity within – or in partnership with – a group, primarily because of my debts. All the same, I hope I will see something that will convince me to stay.

Presentation of the speaker :

Nicolas Gaume : founded Kalisto, a company which creates video games, in 1990 at the age of nineteen. The company grew over the next twelve years with as many as three hundred and fifty employees, marketing more than fifty games throughout the world. In addition, he created NGM Productions in 1994, which published children’s book in China. In 1995, he took part in one of the first French web agencies, Wcube. In 2000, he helped develop winealley.com, a company promoting and marketing wine on the Internet. Today, he is a consultant.

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