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Press Information

EyeToy®: Kinetic **Your Questions Answered**

We answer your questions on the game's origin, development and future.

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Section 1: EyeToy: Kinetic vision:

With Mike Haigh, Director, EyeToy / Singstar™ Development Group, Sony Computer Entertainment Europe [SCEE]

1. Fitness and gaming are two unlikely companions, how did the idea come about?

EyeToy®: Play really kick-started it. Once people had played the game they realised that physical gaming was a reality. First and foremost it was great fun, but also it was great exercise for your arms and upper body.

2. What is the vision behind EyeToy: Kinetic?

The vision behind EyeToy: Kinetic is simple – to combine fitness and fun. What it does is draw inspiration from a wide range of activities that people like doing, that keep you in shape and that are fun. We designed the elements within the game around activities such as kickboxing, modern dance, aerobics, karate and kung fu to ensure that users experience a full body workout.

But what we really want people to do is to improvise – using the way they feel comfortable moving as the guide to how they play the games. The Personal Trainers will give them tips and pointers as to how to approach each game and motivate them throughout - ensuring anyone can play no matter what their ability level.

We have also included over three hours of instructional footage to allow people to try out activities such as Tai Chi, Yoga and Meditation as well as some cutting edge muscle defining exercises.

3. Who was the driving force in this development?

A number of forces were at play: from our interest in developing new games requiring physical exercise, through to suggestions from game players writing in to publications such as Official PlayStation Magazine to the active interest of Nike who also recognised the long-term potential in EyeToy as an aid to undertaking an active lifestyle.

4. What is the role of the EyeToy: Kinetic in defining the games market-place?

EyeToy: Kinetic has proven that physical gaming is here to stay and that playing games will no longer be seen as a solely sedentary pastime. It represents a new dawn in how people perceive video gaming. It is likely that we will see a major new genre of gaming develop to service a market of people keen to make more use of their bodies – at the same time as having fun.

Section 2: The development and the game:

With Mike Haigh, Director, EyeToy / Singstar Development Group, SCEE

1. How long, and how many people, did it take to develop the game?

Approximately two and a half years of development time with a team of 33 people at SCEE with a further 16 at Nike MOTIONWORKS.

2. Was any research undertaken before or during the development?

Nike MOTIONWORKS ran an ongoing programme of research to ensure that the kind of movements EyeToy: Kinetic asked users to perform were fun, safe, beneficial and achievable whilst SCEE undertook extensive market research to ensure that the product was appropriate for the fitness market.

The fitness industry is awash with products promising this breakthrough or that revolution. We took a holistic approach avoiding fads and responding directly to consumers needs. Our focus has been on delivering a product that would enable consumers to reach their fitness goals. That product is EyeToy: Kinetic.

3. What is the gaming experience?

It's physical and fun. If you play properly and don't cheat you're going to get a real sweat on and get a full body workout. The fun element is vital and there's so much diversity that no two workouts will seem the same. You'll be surprised how much the game will push you and in return how much you can achieve.

All along you're getting a comprehensive blend of aerobic and anaerobic exercise, you're getting improved muscle definition, improved balance and posture, faster reaction times, you're learning to think on your feet and react to stimulus in an efficient manner. All of this is going on behind the scenes under the guidance of your personal trainers, but on the surface you're having a whole lot of fun along the way.

4. How did you manage to translate the movement into calories burned?

It's all to do with movement, the more you move the more calories you burn. We therefore developed the technology to calculate the intensity and duration of the movement that the player was undertaking.

When this data is combined with the player's age, height and weight the amount of calories burnt can be calculated. This is similar to the way in which a treadmill determines how many calories you've burnt: it knows your basic physical details, it knows you are running (movement), it knows how fast you are going (intensity) and how long you've been doing it (duration).

5. How did you tailor training programmes for different fitness levels?

The 12 week personal training programmes were designed by the personal training experts at Nike MOTIONWORKS to ensure that, based on the individual, the programme would build in intensity at precisely the right rate. The secret is in achieving the right balance between a programme that gets too difficult too quickly and burns players out, and one that is so easy that players fail to achieve their goals and lose interest. It took a lot of time to get it right but we are delighted with the outcome.

6. How did you ensure the game was interactive?

EyeToy: Play highlighted that feedback is important, people like to be told when they are doing something right and corrected when they are doing something wrong. This is where the personal trainers come in – but their level of interaction goes way beyond just giving you a pat on the back when you do well.

They will set you 'Personal Best' challenges and adjust the difficulty of your workouts once you're doing well to ensure you keep pushing yourself. They monitor your heart rate and offer you advice on your workout intensity. They'll encourage you to rest when they feel you need to, as well as motivating you to push yourself when it's appropriate. Finally they'll suggest moves for you to try and, if you're really struggling, they will even get up and join in to show you how it is done.

Section 3: Working with Nike:

1. How did the partnership with Nike MOTIONWORKS come about?

Nike originally approached us at the E3 show, an industry games convention in Los Angeles, USA. Having been wowed by EyeToy: Play, they were very interested in how they could help video-gaming evolve into a physical activity.

Around this time we were planning EyeToy: Kinetic, and Nike had motion analysis facilities at their Nike MOTIONWORKS sports research facility. They had the kind of physiological and biometric expertise that we needed in order to make EyeToy: Kinetic a success and we had an exciting new technology that they were keen to see evolve. Our collaboration came about very naturally.

2. What skills did Nike MOTIONWORKS bring to the development?

They knew all about movement – what kind of things people aspired to do, what kind of movements were beneficial to a particular part of the body, how the benefits of a particular type of exercise could be maximised and, crucially, what was needed to ensure that this was all safe. We provided the technology to take their know-how into the digital world.

3. What technology was used in the development and how does it work?

We took the motion tracking technology used in EyeToy: Play and expanded it into all kinds of new areas. Now we can calculate how hard an object has been hit and from what direction, and have the game react accordingly as well as using sound interaction where sound is used to trigger objects, for example when you clap your hands.

We also knew that we needed to be able to encourage full body exercise and developed technology to enable this. The original EyeToy camera can only see your upper body when you are correctly positioned but, in order to get people moving around sufficiently to get in shape, we had to get their feet moving. So we developed the **Full Vision Lens** – a small attachment that fits over the front of the camera which enabled us for the first time to see the full body onscreen without the need to stand considerably further back. Every copy of EyeToy: Kinetic comes with one and, believe me, once it's attached and we can see your feet, we can do a whole host of things to get your legs moving and get you on the way to a very thorough workout.

Section 4: the role of Nike MOTIONWORKS

With Jeff Pisciotta, Senior Researcher, Nike MOTIONWORKS

1. What does Nike MOTIONWORKS do?

Nike MOTIONWORKS is an extension of Nike Sport Research Lab (NSRL). The team's mission is to conduct fundamental and applied research on athletes* in motion to gather the information required to create, develop and market innovative athletic products. Research focuses on biomechanics, exercise physiology and quantitative sensory analysis. The NSRL was established in 1980. [* If you have a body, you are an athlete]

2. Why did Nike MOTIONWORKS get involved in EyeToy: Kinetic?

It's always been our vision to develop new products that can challenge and motivate young people to be physically active, and at the same time enhance the experience through videogame applications. Nike has had a long history of partnerships with videogame companies and consumers. Our mission to inspire and motivate athletes challenged our team to develop new consumer insights for video game applications. We developed a program called "physical gaming" which is the bridge between physical and virtual sports.

As we developed the physical gaming program, we understood the need to have a technology partner that has the same vision to innovate as well as the willingness to challenge convention.

3. What role did Nike play in the development of EyeToy: Kinetic?

Nike's relationship with PlayStation for this project has been very collaborative – we provided our knowledge of sports and training to the EyeToy: Kinetic game.

4. What sets EyeToy: Kinetic apart from traditional home fitness programs?

EyeToy: Kinetic offers a whole new level of interaction and more importantly a new measure of physical experience. It changes the home fitness experience from a passive visual exercise routine to a dynamic and interactive workout.

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For further information please contact your local PR manager.