CASE STUDY

Canowindra Challenge: Testing Body Worn Computer Technologies in Commercial Ballooning

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Client

Graham & Jann Kerr - Graham & Jan Kerr run a commercial ballooning company, catering & wine production business in rural Canowindra, NSW Australia.

Project Duration

November 2009 - April, 2010

Project Type

Sponsorship, web streaming, video portfolio, product testing, web design & documentation

Project Summary

EDUPOV provided seed funding of $5000 AUD to a commercial ballooning festival in Canowindra NSW Australia, designed and developed online access for anyone seeking to participate in this event and tested the potential of wearable point-of-view (POV), body worn video (BWV) and vehicular TEDR cameras in commercial balloons throughout this event.

Project Description

Testing wearable technologies in commercial ballooning

The 2010 Canowindra Challenge event provided commercial balloonists with an opportunity to compete for prize money in Canowindra, NSW Australia. EDUPOV provided Graham & Jan Kerr with $5000 AUD seed prize money to initiate this event and additional sponsors added to this prize pool.

This event required careful preplanning to ensure success and smooth operations through the event. A Google document was developed by EDUPOV to provide public access to timetabled events. The GJKerr website was re-designed to include a Flash embed broadcast window for remote access online accompanied by a third party GPS co-ordinates map.

EDUPOV fitted balloons with the Roadhawk RH-1 product and recorded video & audio of ballooning activities. All GPS facilities were successfully captured through this testing. EDUPOV staff also wore the wearable body worn video camera ELMO
SUV 2 whilst in flight preparations and onboard flights for data capture, retrieval, promotion and web streaming.

EDUPOV tested the Streamfolio platform from altitudes of up to 5000 feet above sea level, transmitting over a Telstra 3G via the online broadcast facility to viewers as far away as Canada. An estimated total of 20,000 viewers visited the online broadcast site. A dual transmission was also shown via screens in a Canowindra, NSW Australia shopfront to passersby.

Project Overview

Setup, Equipment, Skills, Initiative & Considerations

- **Web Design** - Broadcast page in GJKerr website
- **Web Design** - Event program (print and HTML)
- **Streaming** - Laptop, camera, DVR and 3G wireless card
- **Broadcast** - Streamfolio online video portfolio platform
- **Equipment** - Roadhawk RH-1, EDUPOV-1 camera glasses, ELMO SUV 2 BWV camera
- **Workshops** - Balloonists briefed daily on technical aspects of equipment
- **Promotion** - Facebook, Twitter, Flickr and EDUPOV website
- **Travel** - Rural location requiring extensive travel
- **Accomodation** - Event required staff to attend physical locations
- **Client Meetings** - Ongoing meetings to co-ordinate development of event

Project Challenges

EDUPOV faced significant challenges in realising this opportunity of providing online viewers with a “*birds eye view*” of activities being conducted in commercial balloons via a video portfolio mediacast. Added to this challenge was the logistics of achieving success in a rural location in testing conditions where inclement weather and unpredictable 3G mobile connections dictated the outcomes of the broadcast to the world wide web.

Challenges encountered during this project include:

- **Distance** - Rural location & setup strategies
- **Connection** - Steady 3G mobile connection to enable broadcast
- **Weather** - Activities subject to weather permitting
- **Communication** - Complex issues of co-ordination & timely communication
- **Technical** - High degree of technical skills to achieve tasks
• Social - Engaging online participants in logistical and critical discourse
• Cost - expensive venture
• Risk - significant operational risks

Project Outcomes

Results & Future Strategies

• Equipment - Roadhawk camera tested & declared operationally successful; EDUPOV-1 camera tested successfully, Roadhawk RH-1 and location based services tested successfully; ELMO SUV 2 BWV camera used to capture 15 hours of high definition video encoded with altitude, longitude, latitude and time coding metadata
• Testing - Streamfolio miniBroadcaster tested successfully
• Workshops - Workshops on TEDR’s and wearable cameras conducted with ballooning staff & crews;
• Feedback - Positive feedback of EDUPOV’s role in this event;
• Engagement - Extensive community engagement with EDUPOV wearable camera products & services;
• Exposure - Worldwide exposure to the capabilities of Streamfolio;
• Media Coverage - Positive local media coverage, mentions/articles for EDUPOV;
• Balloonists Participation - 17 national and international balloon crews participated;
• Review - Opportunity to review successes / challenges with Client.
• Sponsors - Positive feedback from sponsors;
• Future - Client declared future development of event & concepts

Conclusion

A successful test of technologies in commercial ballooning

The 2010 Canowindra Challenge was a complete success in terms of logistics, capital investment and overall complex technical testing for EDUPOV. Positive feedback proved that EDUPOV's investment in this Australian community focussed and commercially oriented initiative was well founded. This event provided conclusive evidence that the Streamfolio platform and application has potential to extend beyond its current form of an education sector oriented video portfolio.

Overall, despite inclement weather and variable connection on 3G mobile data available signal, this event provided clear and conclusive documentation of the cohesive links between EDUPOV developed broadcast and live streaming video portfolio platforms and related POV / TEDR equipment.

Extensive networking opportunities and community engagement has brought about possibilities to test and grow the EDUPOV range of products and services in the commercial ballooning and events based streaming industry.
References

News Article - *Things Are Looking Up In Canowindra*, Central Western Daily, Wednesday, April 7, 2010

*Main Website* - http://www.gjkerr.com.au

Sponsors Website - http://www.edupov.com


Sponsors Website - http://www.streamfolio.com


Sponsors Website - http://www.gardnersground.com.au


Social Website - http://www.flickr.com/photos/edupov

Video - http://www.youtube.com/edupov