

Moving with the times : Transition of Ride Smart to an Online Environment

Truong, J.¹, Wallace, P.² & Collins, S.¹

¹ Transport Accident Commission

² Learning Systems Analysis

Abstract

Ride Smart was a CD-ROM created especially for Victorian motorcycle riders. It was designed with the input of experienced motorcycle trainers and instructional design experts to provide training on a range of motorcycling skills such as hazard perception and decision making.

Each year, the TAC sends Ride Smart order forms out to approximately 20,000 newly licensed riders. Approximately 16% of the riders proceed to order the free CD. However, only 2.5% of the riders who order the CD actually complete all the exercises. It was proposed that an on-line version of the training could potentially offer a better means to track and inform the formulation of strategies to improve completion rates. A collateral benefit of re-developing Ride Smart as an online product was the opportunity to make enhancements that might better engage users and thereby motivate them to complete the product.

This paper will discuss the transition of Ride Smart to an online environment, the enhancements made and the motivational strategies used to improve the uptake and completion of the resource.

Key works: Motorcyclists, Hazard perception, Online

Background

The TAC's Ride Smart interactive CD-ROM training product for motorcyclists was produced following the success of a similar product created by the TAC for learner drivers called Drive Smart. Drive Smart was the result of three-years of research by the Monash University Accident Research Centre.

Ride Smart is a CD-ROM created especially for Victorian motorcycle riders. It has been designed with the input of experienced motorcycle trainers and instructional design experts to provide training on a range of motorcycling skills such as hazard perception and decision making. Developed by the TAC, it was the first product of its type in the world.

The CD-ROM consists of 102 exercises and was designed to be completed over several sessions. This training product was developed to supplement on-road riding experience and existing forms of rider training.

Ride Smart is provided free to all Victorian motorcycle permit or licence holders upon request. Riders are invited to order their free copy of Ride Smart through a direct mail campaign. The product can be ordered via the post, by fax or online through www.spokes.com.au. Other distribution channels included accredited motorcycle training providers by arrangement. The product has also been featured through the TAC's involvement in the Motorcycling Expo and Motorcycle Grand Prix.

Ride Smart Online

Each year, the TAC sends Ride Smart order forms out to approximately 20,000 newly licensed riders. Approximately 16% of the riders proceed to order the CD. However, the data we collect from the Ride Smart completion competition indicate that only 2.5% of the riders who order the CD actually complete all the exercises. The key reasons for the low completion rates include:

- a) the CD-ROM no longer works on all platforms (eg. different versions of Microsoft Windows and not at all on MAC systems)
- b) some of the footage used for the exercises appear very dated
- c) low motivation to continually return to the training program and complete the product.

It was proposed that an on-line version of the training could potentially offer a better means to track and encourage completion of the exercises and address the software issues and the aging appearance of the product.

The CD-ROM has now been broken down into several segments and transitioned to an online environment. A number of enhancements were made to the online product and motivational strategies implemented and these will be discussed below.

Target Audience

The purpose of Ride Smart is to support the development of novice motorcycle rider hazard perception and decision-making skills. These are cognitive skills and Ride Smart does not attempt to train psychomotor motorcycle riding techniques, although the content must also be seen to be consistent with safe motorcycle handling techniques.

While novice riders are of special interest, the online version of Ride Smart is also intended to provide benefits to more experienced riders by way of refresher and common hazard awareness training. Consequently, the content and instructional design of Ride Smart online is primarily aimed at novice motorcycle riders with consideration of additional content and instructional strategies that would be more relevant to experienced riders.

Enhancements to Ride Smart

Structure of Ride Smart

The Ride Smart CD-ROM consists of 102 exercises which sits under the three modules of Observe, Self-defence on the road and Keeping Control on the road where

the safe riding theme of ‘Observe, Anticipate, Respond’ is presented throughout the program. The Observe module provides practice at detecting hazards to safe riding. The Self-Defence module presents riding contexts involving objects and animals in the road environment and other vehicles not giving way and the Keeping Control module presents riding contexts involving losing control and rear-end accident risks. Users must first complete the Observe module before gaining access to the two on the road modules.

The structure of Ride Smart remains largely unchanged in the online version. However, in Ride Smart online, in order to increase motivational appeal, users are able to navigate through all the exercises freely within each module and complete them in any order they wish. In addition, users are able to select exercises based on the road environment and bike type.

Development of new exercises

In the Ride Smart CD-ROM, the exercises were created utilizing footage originally filmed for Drive Smart and was optimised to ensure suitability for a motorcycle audience. With Ride Smart moving to an online environment, this presented a good opportunity to refresh the product through the addition of new exercises.

The new exercises were created through utilising existing video clips that have only been used once and deemed suitable for re-use in an additional exercise. In addition, new footage was filmed and allowed the creation of exercises that targeted some road safety issues especially relevant to motorcyclists. These issues were not previously addressed due to the limitation of using existing footage filmed for Drive Smart.

The new Ride Smart exercises were scripted to achieve the following:

- Address high incidence motorcycle crashes where these were not already well represented in the Ride Smart CD-ROM:
- Address the risks posed by other road users not noticing/giving way to motorcyclists
- Provide experience of night and wet weather conditions
- Provide scooter contexts
- Show positive head checks, especially when changing lanes.

In addition to the creation of new exercises, a number of exercises on the CD-ROM were removed for the online version due to the exercises looking ‘dated’ or where the hazards depicted in the exercises were harder to detect due to the quality of the footage. All new exercises were evaluated to ensure there were no detrimental learning effects on novice riders.

Refresher Pack

An additional pack consisting of 24 exercises were created to assist riders to refresh the skills learnt through the completion of the main program. The refresher pack has been designed to complement the main exercise programs and contains a cross section of all the exercise types in the main pack.

Email reminders will be sent out to riders approximately three months after the completion of the main program, inviting them to complete the refresher pack to refresh their skills. Riders that fail to complete all the exercises in the main program pack after a long period of time will also be sent an email to invite them to perhaps complete the refresher pack instead.

Tracking

With the Ride Smart CD-ROM, there was no mechanism in place to track the number of users who complete the product. Completion rate was inferred from the amount of people that entered the competition at the conclusion of the program. The online version is now able to more accurately track how many users complete the product and how far users progress in the program. This tracking mechanism will help inform which users would benefit from follow up emails to encourage them to return to the program. In addition, it would provide information on where riders are most likely to lose motivation and strategies can be developed accordingly.

Motivational Strategies

Motivation is important for effective learning in terms of both active engagement in developmental activities and for the completion of these activities. For these reasons, strategies to build and sustain motivation throughout Ride Smart are required. Threats to motivation and countermeasures currently used in Ride Smart are listed in Table 1.

Table 1. Current Ride Smart CD-ROM Motivational Strategies

Threat to Motivation...	Current Strategy...
Failure to correctly complete activities	In general, feedback aims to avoid suggesting there is only one correct answer to an activity
The large number of exercises leads to boredom	Display number of exercises completed and remaining Provide variation of stimulus through a range of exercise types and scenario contexts
No tangible reward for completion of Ride Smart	Entry to a prize draw upon registering completion
Little learner control over selection of exercises	Selection of either the Self-Defence or Keeping Control modules after completion of the Observe module

The online version of Ride implemented the above strategies as well as the new strategies described below.

- **Prizes.** Prize Draws for Completion of Blocks of Exercises
 - Riders will be automatically entered into a prize draw upon completion of each of the three modules as well as upon completion of all the modules. Riders who complete all the exercises are therefore entered into a total of four prize draws and have a higher chance of winning a prize.
- **Reward Activities.** Discreetly-Positioned Reward Activities
 - Upon completion of a certain number of exercises (eg. 10, 20, 30), a pop up video of riders providing tips on safe riding is made available to those that wish to view them. This assists in breaking up the monotony of completing the exercises.
- **Exercise Grouping and Access**
 - Exercises are grouped into environment type (eg. freeway riding, rural riding) and bike type (eg. scooter, dirt bike) and riders are provided with greater freedom to navigate between exercises as well as selection

of the exercises and order in which they would prefer to complete them.

- **Email reminders**

- Riders will be sent emails at set intervals to remind and encourage them to return to Ride Smart online to complete any unfinished modules.

- **Hall of Fame**

- Riders are able to view their score based on the number of exercises completed to date. Under this functionality, riders are also able to track their progression against other riders.

Conclusion

The transition of Ride Smart to an online environment allowed for some of the issues faced with the CD-ROM (eg. software issues, low completion rates) to be addressed through the addition of new exercises, a refresher pack and various motivational strategies and it is anticipated that the participation and completion rate of the product will be greatly increased. The product will be launched in the coming months and any tracking results in terms of participation and completion will be presented at the conference in August 2012.