17 CD-I APPLICATIONS AT THE BRITISH GOLF MUSEUM

And the United States Golf Association Museum and Library

Peter N Lewis
British Golf Museum
UK
and
Karen Bednarski
US Golf Association Museum & Library
USA

The British Golf Museum (Lewis)

A museum should use the type of technology that is most suitable for the end purpose of the display and its budget. However if one is thinking about using some form of optical disc display, one should be aware of potential advantages of CD-I.

The implications of a single world wide standard are profound. It means that any disc made anywhere in the world will play on anybody's CD-I player. If one develops an interactive display for a museum on CD-I, if carefully thought out, it can have a very active life outside the confines of a museum. It can either be sold commercially or be sent as part of a display to any other museum or exhibition in the world that uses CD-I. Another is that it is possible to develop a disc in conjunction with other like museums. This is a networking process that involves what is known as creating a template.

A template is a basic CD-I software structure program that can be adapted for multiple uses. To utilise this concept, museum professionals need to think laterally. They need to sit down with people from other museums who have the same general types of collections - be it single subject or multi-discipline collections - and then look at the general principles of what a disc could contain and how it could be structured. By sharing the costs of devising the template, the overall cost of making a CD-I disc would be greatly reduced.

This paper will look at the CD-I discs developed, first at the British Golf Museum and then at the United States Golf Association Museum and Library and which share a common engine.

The British Golf Museum, St Andrews has one of the most sophisticated optical disc installations in the UK. There are 13 interactive work stations, four tableaux commentaries and an audio visual theatre all running off of Compact Disc Interactive or laserdisc

players. All of this is contained in 6,500 square feet of display space. The museum, which opened in June 1990, tells the story of the development of British golf from the middle ages to the present day. There are currently eight laserdisc work stations and six CD-I displays, containing 149 programs or a/vs. The work stations are integrated into eight of the permanent galleries. Multiple touch screens are used in two galleries so there are 12 full work stations in the permanent galleries plus there is one CD-I work station in the temporary exhibition gallery which allows us to show a variety of different CD-I discs. Another CD-I work station uses a simple button to activate the single program on the disc.

The creation of all these interactive displays falls into three distinct phases. The common factors of each phase were that all the programs were produced by Ted Toms of IContact, all the hardware was supplied by Philips Electronics and all the scripts were written by me.

Phase 1 began in August 1989 and consisted of the design, production and installation of the initial interactive displays for the museum. When the museum opened, there were 11 touch screens with 138 a/vs, five tableau commentaries and one slide show. Eight of the touch screens were run by laserdisc players and three by CD-I players. The story of Phase 1 of the museum was dealt with in detail at ICHIM'91. In brief summary, Ted Toms and I spent a great deal of time devising how the interactive technology could be used in the museum and we adhered to six basic concepts.

Integration

The work stations were both thematically and physically integrated into the museum.

Content format

There were with a few exceptions two basic formats used. 98 of the a/vs used image with voice over and 38 were statistical. The remaining two were both quizzes, which used a different format consisting of text only multiple choice questions.

Good TV

From a content point of view each a/v, had to not only be historically accurate but it had to be good TV at the same time.

Simple to use

From a visitors point of view, each touch screen had to be extremely user friendly.

Length of each A/V

To maintain visitor interest all a/vs were kept to a maximum length of 70 seconds.

The visitor satisfaction

To handle the problem of many visitors wanting to use the interactive displays simultaneously, we spread them throughout the museum and used slave monitors for ease of viewing.

By the summer of 1990, CD-I had made great strides forward as a working technology and the museum agreed to help IContact and Philips Electronics to make a CD-I disc for domestic use. This would coincide with the launch of CD-I as a consumer technology in 1992.

This disc, **Great British Golf**, was once again produced by Ted Toms and was largely based on material prepared for the museum. However as the museums a/vs were

designed to be seen in conjunction with three dimensional displays, they did not tell a complete story when taken out of that context. The a/vs in the museum effectively covered 1860 to 1989 and **Great British Golf** was to cover 1457 to 1940. Topics that were covered by three dimensional displays were generally not dealt with by the touch screens.

In the end, 70 a/vs from the museum were used and I had to write an additional 22 to fill the gaps plus a 500 question quiz.

Great British Golf is divided into three unequal sections. There are the 92 historical a/vs, a 500 question quiz and an animated game. The menu design, while adhering to the same general principles as the museum ones, is more elaborate. There is an additional layer of menus compared to the museum, but it is still possible to stop and exit any a/v at any time. The quiz on the consumer disc is much more difficult than neither of the ones in the museum. It uses text, sight and sound and operates from a base pool of 500 questions. To do well, the user will have needed to study the history a/vs.

The third part is an animated the golf game set on the Old Course in St Andrews and using historic figures and equipment. The history section of the disc does not tell the user how to play the Old Course, but it does tell them about the characters they are choosing and gives them insight into the type of ball and clubs to use.

Work began on the consumer disc in October 1990 and was finished in 1992.

When the consumer disc was in production, it immediately became apparent that it had three areas of potential for the museum. The first was the recognition and publicity that the museum would receive from the sales of the disc. The second was that parts of the disc could be used to improve displays within the museum itself. The third was the ease with which it could be used as part of a travelling exhibition or trade show because of the single world wide standard.

As stated, 22 new a/vs were created for the consumer disc that were not in the museum plus the game and quiz. While the disc was still in production, we began to look for ways that we could utilise some of these within the museum. This could be done by using WORM discs (Write Once Read Many) which are considerably less expensive to make than a pressed disc. The first consumer disc a/v found its way back into the museum in August 1991.

There was a slide show display in the museum on the "Origins of Golf" which had not worked well for a variety of reasons. A version of that show had been made for **Great British Golf** and a WORM disc of the a/v was made and a new display was built within the museum for it replacing the old slide show. The speed of response after pushing the start button and the clarity of the image contrasted sharply with the noisy and slow operation of the slide show.

The next update occurred in the spring of 1992. We added a stand alone work station in the temporary exhibition gallery for two purposes. One was to show two more WORM discs from **Great British Golf** and the other was to give us the option to use any other suitable CD-I discs that were already in production or might be soon such as **Great American Golf.**

The two WORM discs were the game and the quiz. We found that within the museum environment, the quiz was too difficult for the average visitor but the game has proved to be the most popular display in the entire museum.

This display represented a major change from the original installation in that the method of interface moved from a touch screen to a tracker ball. This was necessary to give us flexibility and was also much more economic. The tracker ball interface meant that we

could play any disc straight away and without incurring any programming costs that would be needed to modify a touch screen.

This move away from touch screens to tracker balls continued with the completion of another work station in January 1993 that once again used a WORM disc from **Great British Golf**. Although the first gallery in the museum included the above mentioned "Origins of Golf", the first full work station was not until the seventh gallery. We felt that it would be beneficial to introduce a work station earlier in the visitor route and a WORM was made of the entire "Early Golf" segment of the consumer disc. This work station is located in the second gallery and contains eight new a/vs that relate to the second and third galleries.

If we were beginning the British Golf Museum interactive displays today, we would have done it in the reverse manner by designing a consumer CD-I disc that could be easily segmented for use in the museum. In 1989, it was not possible to do this, in 1993 it is. If I was starting today and was using CD-I only in the museum, I would probably opt for tracker ball interfaces simply on economic grounds.

Our visitors can make no distinction between laserdisc work stations and CD-I ones. They are interested in the content and production values. The advantage of CD-I over laserdisc from a museum perspective is the fact that the a/vs can have a life outside the museum and the structure of the disc can be of value to other museums.

The United States Golf Association Museum and Library (Bednarski)

The United States Golf Association Museum and Library in Far Hills, New Jersey, installed its first interactive video, a laser disc application, in June 1988. The hardware components consist of a 13 inch touch screen monitor, a 25 inch slave monitor for group viewing, two speakers, a laser disc player, an auto-cut printer, a Touchcom computer, a Touchcom mass storage unit and a video adapter box. Visitors are offered five main menu selections which include the opportunity to design their own golf hole, do a quiz and request a printout of the quiz questions, compare swings styles of great golfers utilising a split screen image, review film clips from the history of the game, and read the latest United States Golf Association (USGA) news.

This interactive video quickly became the most popular exhibit in the Museum and received both a Cindy and a Nebraska award in 1988.

The application got such a great response from visitors that, despite the amount of hardware, we decided to "take it on the road" and use it as a public relations tool for the Museum. We had custom designed, four large metal travelling cases constructed for each major piece of hardware, to which we added wheels to facilitate moving them around. It was expensive to ship and cumbersome to move.

Many of our display sites were tents on golf courses which presented an ever greater challenge. Temperature and humidity conditions often resulted in considerable down-time for the video. The response from the audience, however, still made it worth all the effort.

In follow-up conversations with people who had visited the USGA Museum and Library, we learned that one of their most memorable experiences was using the interactive video. Not having seen interactive video in many other museums, we felt like real pioneers.

In September 1990, I attended the official opening of the British Golf Museum in St Andrews, Scotland. To my dismay, they had 11 stations of interactive video. We had been upstaged and outdone! At the time, I assumed they were all CD-I. Later, I learned that this

was not actually the case. But I had been introduced to the technology and knew that we wanted CD-I for the USGA Museum and Library.

The technology was new and it was also very expensive. But, it occurred to me that the British Golf Museum had probably suffered through a trial and error process in developing their programs; and that because of the similarity of our collections, we might be able to plug our material into an existing software template. Maybe their experience would save us considerable time and effort, and hopefully significant dollars as well.

Fortunately, the same concept had occurred to Philips and IContact and by July 1991 we were hard at work writing 750 trivia questions, designing animated characters for The Game and an imaginary golf hole on the grounds of the USGA, and writing scripts and reviewing assets for the 35 vignettes on the history of the game in the United States.

Our primary goal was to utilise the basic format and menu structure designed by IContact for the British disc, yet be as creative as possible within those parameters. From the beginning, we also worked with the idea that the two golf museums would share the discs for display purposes in our respective museums, and that Philips might promote and sell the discs as a package. The similar formats would obviously contribute to their compatibility. We also went so far as to pattern our title after the British disc; theirs being **Great British Golf** and ours being **Great American Golf.** Naturally the first discs are labelled Volume I, providing the opportunity to expand at a later date.

Frequent consultations with Peter Lewis at the British Golf Museum over the next six months enabled us to proceed with the USGA disc in a timely and efficient manner and avoid many of the pitfalls that come with being the first to work on such a project.

The trivia quizzes are nearly identical in format, but have a different look and feel. We wrote and recorded enough questions for two discs. IContact produced them all at the same time, so the questions for Volume II were ready before Disc 1 was even completed. With the focus of our questions on American golf and the British disc questions on British golf, they work well as a package for consumer purposes.

The golf game is also very similar in format. The user has the opportunity to play a golf hole under a variety of playing conditions with the ability to select clubs and control the direction of the shot. Totally different animated characters relating to the history of the game in our respective countries, different golf holes, one real and the other fictitious, again result in the appearance of unique programs. Different playing hazards on each hole also contribute to the uniqueness of each, despite the similar overall format.

The greatest difference in the two applications appears in the history sections. The British disc utilises an unseen single narrator to describe the assets of 92 historical scripts. The historical information on the American disc is organised as a series of 35 vignettes, consisting of a dialogue between two well known golf personalities, each lasting about 60 seconds. They appear on the screen throughout the vignettes as animated characters in a "space cart", which moves back and forth through time in the history of the game. Again, similar material is covered, with comparable menu structures, but with a quite different end result.

Great American Golf I made its debut in a tent at the U.S. Open Championship at Pebble Beach in June 1992, a little less than a year after the beginning of the project. It opened to rave reviews and was particularly appealing to young people attending the Championship. The monitor, CD-I player and Roller Controller all fit into one reasonably sized, custom made travelling case. In the past year **Great American Golf** I has made numerous trips around the country at a cost considerably less than that of our more cumbersome, laser disc application. Anyone can hook up the hardware in a few minutes

and minimal space is required for display. As CD-I players begin to proliferate, because of the world wide standard, eventually all we will need to send is the disc alone.

In summary, two museums with similar collections were able to create discs using the same template that are compatible for display and marketing purposes, which at the same time, reflect the different personalities and public relations needs of their respective institutions.