It is an object of the present invention to provide connectivity between audience response systems and digital content servers or other digital cinema applications. It is further an object of the present invention to interface a system for collecting data from an audience with a digital content server for use in an interactive content session. It is yet a further object to provide an audience data management system with open access to digital content servers for digital cinema, for interactively changing content from said digital content server directed by the input of said audience data management system.

The present invention relates to a data management system for providing connectivity between audience response systems and digital content servers, said digital content servers used for managing interactive digital cinemas and controlling a digital projector for projecting content on to a screen, and said data management system comprising:

- input means for collecting digital data from members of an audience, said digital data being in response to content projected in a cinema, said input means connected via an individual network per theater to a master server, said master server comprises:

(i) processing means for processing said digital data and delivering processed data, and

(ii) a digital content interface for interfacing said processed data with a digital content server providing interactive content to said audience, wherein said digital content interface is further configured to provide alternative content such as entertainment programming other than movies including live events from external sources to said digital content server, selected based on said processed data, and is configured to receive content requests from said digital content server.

~~a data management system for interactive digital cinema, comprising input means for collecting digital data from members of an audience and processing means for processing the data. The data management system further comprises a digital content interface for interfacing the processed data with a digital content server as commonly used in digital cinema for providing content to the audience.~~

~~In a specific embodiment the audience input data is used by the digital content server to provide interactive content to said audience, whereby the content is selected based on the processed data.~~

~~In another embodiment the audience responds to the content provided by the digital content server.~~

~~In one embodiment the digital content interface is configured to send processed data to a digital content server. In another embodiment the digital content interface sends alternative content to a digital content server, selected based on said processed data. In yet another embodiment the digital content interface is configured to receive content requests from said digital content server.~~

In a specific embodiment the processing means comprises computer processing means for performing calculations and other computer instructions on said data.

The digital content interface is connected to the digital content server through a network, wireless or not.

In a preferred embodiment the data management system further comprises data storage means for storing said collected or processed data, or any alternative content.

In one embodiment the digital content interface may be configured to communicate the data or content through a network or via web-based technology such as e.g. intranet and other webservices.
In a specific embodiment the data management system further comprises a seat occupancy detection system.
The digital content server typically provides any content including advertising, movies and gaming.

In a second aspect the present invention relates to a method for providing connectivity between audience response systems and digital content servers, said digital content servers used for managing interactive digital cinemas and controlling a digital projector for projecting content on to a screen, said method comprising the steps of :
- collecting digital data from members of an audience in response to content projected in a cinema via input means, said input means connected via an individual network per theater to a master server,
- processing said digital data by a processing means in said master server and delivering processed data,
- interfacing said processed data by means of a digital content interface in said master server with a digital content server providing interactive content to said audience, wherein alternative content such as entertainment programming other than movies including live events is provided from external sources to said digital content server, selected based on said processed data, and wherein content requests are received from said digital content server.
~~interactive cinema, comprising the steps of collecting digital data from members of an audience in response to content projected in a cinema, processing said data, interfacing said data by means of a digital content interface with a digital content server, providing interactive content based on said data. Said interactive content is stored on said digital content server or provided by said digital content interface.~~

In a specific embodiment there is provided a data management system for collecting responses from a theater audience to interactive cinema, said interactive cinema being managed by a content server, said responses being inputted on keypads applied at the theater seats, and a central server connected to said keypads for processing said inputs into a format suitable for use by said content server.

In another specific embodiment there is provided a data management system wherein said input means is applied at each seat, either retro-fitted or integrated. The input means is a button keypad connected to said processing means through a network.
In a specific embodiment said network is wireless having a self-routing, self-healing meshing topology scalable up to over 1000 nodes.

The data management system of the present invention may be used for marketing or entertainment purposes, such as e.g. surveys, corporate events, advertisements, interactive learning events, Q&A sessions, voting sessions, business meetings, seminars, multi-media presentations, training, and conferences.

CLAIMS

1. A data management system for interactive digital cinema, comprising input means for collecting digital data from members of an audience and processing means for processing said data characterized in that said data management system further comprises a digital content interface for interfacing said processed data with a digital content server providing interactive content to said audience.
2. The data management system of claim 1 wherein said content is selected based on said processed data.
3. The data management system of any of the previous claims wherein said audience responds to said content.
4. The data management system of any of the previous claims wherein said digital content interface is configured to send processed data to said digital content server.
5. The data management system of claim 5 wherein said data is content selected based on said processed data.
6. The data management system of any of the previous claims wherein said digital content interface is configured to receive content requests from said digital content server.
7. The data management system of any of the previous claims wherein said processing means comprises computer processing means for performing calculations and other computer instructions on said data.
8. The data management system of any of the previous claims wherein said digital content interface is connected to said digital content server through a network.
9. The data management system of claim 8 wherein said network is wireless.
10. The data management system of any of the previous claims further comprising data storage means for storing said collected or processed data.
11. The data management system of any of the previous claims wherein said digital content interface is configured to communicate said data to the web.

12. The data management system of any of the previous claims wherein said digital content server provides any content including advertising, movies and gaming
13. The data management system of any of the previous claims, further comprising a seat occupancy detection system.
14. A method for providing interactive cinema, comprising the steps of collecting digital data from members of an audience in response to content projected in a cinema, processing said data, interfacing said data by means of a digital content interface with a digital content server, providing interactive content based on said data.
15. The method of claim 14 wherein said interactive content is stored on said digital content server or provided by said digital content interface.

CLAIMS

1. A data management system for providing connectivity between audience response systems and digital content servers, said digital content servers used for managing interactive digital cinemas and controlling a digital projector for projecting content on to a screen, and said data management system comprising:

- input means for collecting digital data from members of an audience, said digital data being in response to content projected in a cinema, said input means connected via an individual network per theater to a master server, said master server comprises:

(i) processing means for processing said digital data and delivering processed data, and

(ii) a digital content interface for interfacing said processed data with a digital content server providing interactive content to said audience,

wherein said digital content interface is further configured to provide alternative content such as entertainment programming other than movies including live events from external sources to said digital content server, selected based on said processed data, and is configured to receive content requests from said digital content server.

2. The data management system of any of the previous claims wherein said processing means comprises computer processing means for performing calculations and other computer instructions on said data.

3. The data management system of any of the previous claims wherein said digital content interface is connected to said digital content server through a network.

4. The data management system of claim 3 wherein said network is wireless.

5. The data management system of any of the previous claims further comprising data storage means for storing said collected or processed data.

6. The data management system of any of the previous claims wherein said digital content interface is configured to communicate said data to the web.

7. The data management system of any of the previous claims wherein said digital content server provides any content including advertising, movies and gaming

8. The data management system of any of the previous claims, further comprising a seat occupancy detection system.

9. A method for providing connectivity between audience response systems and digital content servers, said digital content servers used for managing interactive digital cinemas and controlling a digital projector for projecting content on to a screen, said method comprising the steps of :

- collecting digital data from members of an audience in response to content projected in a cinema via input means, said input means connected via an individual network per theater to a master server,
- processing said digital data by a processing means in said master server and delivering processed data,
- interfacing said processed data by means of a digital content interface in said master server with a digital content server providing interactive content to said audience,

wherein alternative content such as entertainment programming other than movies including live events is provided from external sources to said digital content server, selected based on said processed data, and wherein content requests are received from said digital content server.