AgileTV Corporation Business Plan April 2000

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BUSINESS PLAN

EXECUTIVE SUMMARY

INTRODUCTION

Access to electronic media and data resources is becoming more and more complex as the available data and services proliferate. The volume of data and services alone is increasing, and often duplicate or overlapping services are offered, each with a potentially different format or a different set of links to other related resources. On cable TV alone, for example, the volume and range of options have already outstripped convenient choice through manipulation of a traditional remote. The point and click remotes now becoming available for response to visual menus are more capable, but even they have limits. Such menus are, in effect, a hierarchical series of displays from which the user must choose in order to tunnel into the data available. These displays of necessity preselect and limit user choices, often omitting other, perhaps preferred options. For managing access to the full range of entertainment and data services available on cable TV, we have almost reached the need for keyboard input in order to formulate a data query or service request. The extension of such services as that currently offered by WebTV1 definitely requires keyboard input, and in some informal, perhaps poorly illuminated user settings, keyboard use is inconvenient for a touch typist, and thoroughly impractical for the untrained. It is clear that, as the range of services increase or as users' express preferences for less formal and more ergonomic input methods, the keyboard too will become inadequate as a user interface, and will restrict greater use of the data available and services offered.

The user-access solution which will support long-term growth in the face of ever-increasing data and resource complexity is common to all. It is spoken, natural language, as is used in human-to-human communication. The natural language specification means that little or no training is required, making access a simple, pleasant experience for the uninitiated. Feedback from the system will allow the user to augment earlier input, refining his query or request.

Initially, the AgileTV system will be directed to the management of cable TV offerings. These currently include scheduled programming, pay-per-view programming including video-on-demand, and data services (stock reports, sports scores, weather, etc.) Application of this AgileTV navigation technology to the internet and other more complex services, commercial transactions, and appliance controls are areas for future growth of the Company.

HISTORY: THE EVOLUTION OF CABLE TELEVISION

Cable TV evolved in the 1960s as an answer to the shortcomings of broadcast TV. These shortcomings included broadcast quality, programming, geographical limitations to coverage and access, and bandwidth availability. Cable TV had its own shortcomings

- notably reliability. Early operators were locally based in the areas they served, and were often under-financed. Broadcast programming was sometimes difficult to license, therefore requiring the user to deal with multiple inputs. Reliability was uncertain, often as a result of inadequately engineered systems, poorly constructed.

In time, local operators were consolidated into larger, multiple-system operators (MSOs).

MSOs were better financed and were able to upgrade system, reliability. They were more successful in licensing broadcast programming, and in fact often originated programming themselves. This greater reliability and range of programming contributed significantly to the popularity of cable services. Further consolidation continues today, and competition between competing or adjacent services continues to drive further increases in programming and services offered.

It is against this background that AgileTV enters the scene with its navigation system.

TV NAVIGATORS AND INTERACTIVE PROGRAM GUIDES

Current navigation is by means of a program guide from which the user chooses his programming. Early program guides offered the viewer the opportunity to review channel-by-channel or hour-by-hour, what was being offered, often in a matrix format. Some versions scroll before the viewer in a pre-determined manner, over which the user has no control. If a user wants to see a certain portion of schedule again, he or she has to wait for the automatic scrolling to bring it by again.

A newer program guide offered is interactive in that the viewer can control the visual presentation of the programming available. If desired, the user can elect to eliminate – or censor – portions of the total presentation such that the user only has to scan and consider those channels or sorts of programming likely to be of interest. As available programming and services proliferate, however, this censoring becomes impractical. Equally, where there is a diversity of interests among several users of one TV or monitor, each user will have his preferences for the interactive program guide, and with little agreement among users, manipulation of the censoring will serve to defeat its purpose. Each will have to reconfigure his censoring at each use, or else censoring will have to be abandoned, forcing the user to review the entirety of the program guide offering.

It is one of AgileTV's objectives to simplify and expedite each user's ability to arrive at the program or service of his choice, without regard for the previous user's preferences and without review of extensive programming data, and serial manipulation of hierarchical formatting.

DEVELOPMENT OF THE AGILETV SYSTEM

The initial AgileTV system involves input from a user through a handheld remote incorporating a microphone. Input is initiated by depressing a microphone button or key, and speaking into the microphone. The remote and microphone communicate via IR or RF with the set-top box, or with a small appliance adjacent the set-top box on the TV or monitor. The set-top box or appliance digitizes and compresses the voice input, and

transmits the input to the head-end of the system over hybrid-fiber-coax in out-ofchannel bandwidth. At the head-end, a voice-recognition engine determines meaning of the input, provides the user with keyword feedback reflecting the essence of the input. If necessary, the voice-recognition engine will solicit clarification of the input or further information to augment and further perfect the request, also on the out-of-channel space. All feedback is displayed visually, and may additionally be presented by voice synthesis.

Once the input request is complete, the voice-recognition engine will issue operative or functional commands to the system in response to the input. The function may be, for example, to retrieve data, to order TV programming, to complete an E-commerce transaction, to control an appliance, or any other function for which the system is enabled.

INTELLECTUAL PROPERTY

AgileTV is strongly committed to the use of intellectual property to protect all aspects of our system wherever possible, and to protect the use of our technology as a part of other operating systems. As of now, we have patent applications pending, as yet without office actions by the US Patent and Trademark office, but are confident they include important patentable matter. We will prosecute these applications in the US and in important foreign markets as well.
We have already formed strategic alliances with and, and both these organizations have equally strong commitments to proprietary protection as well. We believe the collective combination of the patent positions of the three companies, plus other fillings, will present a formidable obstacle to anyone contemplating entering our business.
EXECUTIVE STAFF

TIMETABLE

ECONOMIC MODEL

FINANCIAL REQUIREMENTS

FUNDING