

Unified Messaging

In both local and international markets, unified messaging can provide the flexibility to support a variety of automated messaging and communications media and technologies

Electronic messaging is now a basic component of business worldwide. In plant automation, process control, manufacturing, distribution, sales and customer service, the systems and applications that businesses depend on, depend, in turn, on electronic messaging for rapid and reliable delivery of critical information. In many cases, messages must be delivered to personnel who may be literally anywhere. In any part of a company, plant or facility, a city or even a foreign country.

Daily business and commerce now succeeds or fails as a function of the speed and reliability with which we communicate information. And, as computers and electronic communications systems have become ubiquitous, the pipelines that feed information to us have multiplied. The telephone, which has for many years been the fundamental tool of business communication, has been joined on the desktop and in our pockets by fax machines, electronic mail, pagers and portable Internet devices.

Automation

Computers and automation have multiplied the number of ways that messages can be sent and received. At the same time, we have been gradually delegating to machines more and more of the responsibility for reviewing, sorting and trying to make sense of the barrage of information that we receive electronically every day. Unified messaging is a term that is frequently used to describe or identify systems that have been designed to help us manage messages sent and received through a variety of electronic media and technologies.

In the minds of many industry pundits and visionaries, unified messaging is supposed to be the killer application that saves us all from drowning in a tidal wave of electronic information. There is undoubtedly some attraction in the idea that we might be able to direct all of our e-mail, voice-mail, fax and other inbound communications to some intelligent agent who can dutifully review and analyze it, discard the trash, file reference information for later study, politely reply to routine requests for information, and efficiently inform us of urgent matters and

information which relates in some substantive way to our express and registered areas of interest, concern and responsibility. We used to call this agent a secretary. And, if you don't have or can't get a real, live, human one, an electronic version may very well be the next best thing.

Outbound Messaging

But unified messaging applications that focus on the universal inbox have largely overlooked the fact that there are many critical business applications today for which the problem is not so much how to deal effectively with inbound information, but rather how to intelligently and reliably route and deliver outbound information. For many critical business applications, including help desk, process control, network monitoring, dispatch and distribution, the problem is not how to automate a universal inbox. The problem is rather how to implement a universal outbox that is at once intelligent, efficient, reliable, scalable and auditable. If we are going to bet our business on the success of message delivery, we need to be able to depend on the delivery system to handle any message volume, deliver messages reliably, and be able to track and report the success or failure of every message delivery.

The same technologies and level of sophistication that we have applied to the universal inbox problem can be enlisted to help ensure that outbound automated messaging is as efficient and reliable as possible. But the objectives and strategies we must employ for outbound automated messaging are very different from those we require in the service of inbound messages.

A messenger that serves outbound messages for critical business applications has a 'find and deliver' objective. The automated messenger must implement strategies for message delivery that can adapt to changes in recipient status or location, message source and priority, time of day, day of the week and both application and site-specific criteria. In many cases, the messenger may also have an objective to obtain a confirmation, response or reply related to the message, for return to the message originator. It must also be able to automatically redirect or escalate delivery of a message when initial delivery attempts fail or the initial recipient refuses the message. Plus, it must be able to do all of this in a computing environment that is characterized by change and diversity in operating systems, platforms, networks and communications technologies.

The Challenge

The challenge in automated messaging is to provide an application that will utilize to the greatest benefit a wide variety of media and technologies to achieve some fairly specific objectives, and not become so enamored of or dependent upon any one technology, platform or network that critical message delivery will be interrupted when that resource suddenly becomes unavailable.

PageMate Automated Messenger is a software product that meets this challenge. The software provides capabilities to serve messages in any volume using a wide variety of electronic media and technologies. Client-server architecture allows the software to support operation in heterogeneous networks. PageMate implements both international industry standard and local protocols, providing support for electronic messaging in worldwide markets.

Computer applications and the development of the Internet are changing the face of business and consolidating markets worldwide. Computer applications provide new solutions to the age-old challenge to improve productivity. At the same time, the introduction of the Internet has opened new markets and channels for distribution, making it possible for small, independent businesses in remote parts of the world to compete with established industries in major metropolitan areas.

Electronic messaging is a core component of the systems and business applications that make it all possible. In both local and international markets, unified messaging provides the flexibility to support a variety of automated messaging and communications technologies, adapting and integrating new systems and technologies as required in an environment characterized by growth and change.