

**Application Development Comparison Matrix (Sources: Gartner Group, Giga Group, META Group, Lansa User Group and VisualAge for Java User Group.)**

	<b>Microsoft - Visual Studio 6.0</b>	<b>Oracle-Oracle 9i Developer Suite (ODS)</b>	<b>Lansa-Lansa iSeries 9.0</b>	<b>IBM -VisualAge for Java 4.0 (VAJ)</b>	<b>Borland-Delphi 6.0</b>	<b>Magic Software-Magic eDeveloper 9.0</b>
<b>Development Paradigm</b>	Development requires a solid knowledge of VB, JScript and COM. Creation of web dynamic pages is based on Active Server Pages (ASPs) script.	ODS is a mixture of several languages & methodologies. It offers three development styles: JDeveloper (Java OO coding), Developer (RAD tool), and Designer (model-driven). As a result, it requires expertise both in PL/SQL and Java.	Programming in Lansa requires extensive coding & knowledge of JScript and HTML. In order to extend iSeries applications to the Web, developers are required to use <i>Lansa for WEB</i> .	IBM repositioned its tool strategy and will market its development tools under the WebSphere Studio umbrella. As a result of this strategy, VAJ 4.0 was the last version for this product. Choosing VAJ necessarily implies coding only in Java. In addition to VAJ, WebSphere Studio is required for the creation of Web sites and components.	Development of apps implies strong knowledge of Object Pascal. The server side web development in its turn heavily relies on JScript, VBScript, or Python.	<b>Magic eDeveloper's table-driven development paradigm doesn't require users to produce computer code or proprietary scripts. Magic eDeveloper is a single integrated development environment with one programming language and methodology for C/S and Web.</b>
<b>Maintenance</b>	Maintenance is particularly difficult as the number of components grows.	Any change in Oracle apps requires manual coding as well as skills to maintain both Java and PL/SQL code.	Lansa apps are costly to maintain, because of two source codes: RPG & Lansa. Any mistake or further change in logic must be fixed either manually or by regenerating the whole app.	Maintenance is a time-consuming process, requiring debugging of Java code. The more complex the application, the more error-prone it is.	Change in logic requires manual coding and recompilation. Maintaining Object Pascal, JScript and VBScript causes an overhead for the development staff.	<b>The Magic engine has built-in functionality that enables significant saving in development &amp; maintenance time. Any change in logic is done and updated on the fly. Maintenance in Magic is much faster and less error prone, since there are no 3GL scripts to debug.</b>
<b>Platform &amp; DB Independence</b>	Windows remains the only server platform for Visual Studio. DBMS support is via OLE DB & ODBC.	According to Gartner, ODS is totally directed at Oracle's database and is ill-suited to use with other types of DBMSs. ODBC/JDBC is used for DBMS access.	iSeries applications can be deployed only on machines that support or generate RPG code. Lansa iSeries can only be connected to DB2/400	VAJ uses JDBC for DBMS connection.	The deployment of Delphi applications is limited to Windows and Linux platforms only.	<b>Portability is a major strength of eDeveloper. An application can be developed on one platform and deployed across most popular platforms, including Windows 98/2000/NT, Linux, AIX, HP 9000, Sun/Solaris and iSeries. Magic eDeveloper works natively with Oracle, Informix, DB2, MS-SQL, DB2/400, and via ODBC with Cache, Pervasive.SQL 2000 and other databases.</b>
<b>Components/ Connectivity</b>	Visual Studio does not support J2EE standard. Currently COM+ is being enhanced to take part in the .NET strategy.	Oracle JDeveloper is restricted to the Oracle app server.	Lansa does not provide support for EJBs & Web Services.	VisualAge for Java has comparatively weak support for other app servers. It stays appropriate primarily for WebSphere app server users, causing vendor lock-in.	Delphi is not capable of creating server-side components. To develop EJBs, programmers are required to use JBuilder dev. tool and AppServer for deployment.	<b>Magic eDeveloper and the Magic Application Server are able to provide access to Web Services across the net as well as providing Web Services to other applications. In addition, applications developed with Magic eDeveloper fully integrate with J2EE app servers such as IBM WebSphere and BEA WebLogic.</b>