



Business Success Case Studies

Rational software



TABLE OF CONTENTS

Tejas Networks

Page - 4

Airvana

Page - 6

CDOT Alcatel Research Center (CARC)

Page - 8

Continuous Computing

Page - 10

ANURAG

Page - 12

HBL Power Systems Ltd.

Page - 14

Huawei

Page - 16

Juniper Networks

Page - 18

Medha Servo Drives Pvt. Ltd.

Page - 20

National Aerospace Laboratories (NAL)

Page - 22

Bharat Electronics Limited (BEL)

Page - 24

Juniper Networks

Page - 26

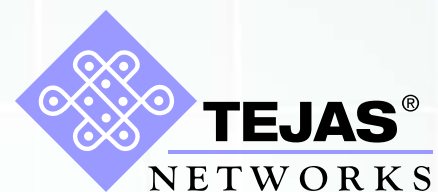


Starting out in 2000 to address the burgeoning needs of the IT industry as a software developer, MicroGenesis has gone from strength to strength in the last decade. MicroGenesis forged a formal alliance with IBM and has now evolved to an advanced level IBM Business Partner enabling businesses to increase their responsiveness in an On Demand market place. MicroGenesis leverages the latest IBM tools and differentiates its bespoke services through its proven implementation skills, its customer centric approach and a strong technical background. The leadership team drives the organization on extensive management capabilities and governance standards.

Achievements:

- ★ **Adjudged by Rational to receive its Technical Achievement Award as an “Outstanding Reseller” in recognition to our technical competence on consultative selling of Rational tools.**
- ★ **Quarterly award from Rational for “The Best Sales Performance” year 2002.**
- ★ **Awarded by IBM as “The Best Partner – Rational Software (South)” for the year 2003**
- ★ **Awarded by IBM for the exemplary contribution towards software business for the 1st Half of 2004**
- ★ **Awarded by IBM Global Services as “The Best Partner (Software)” for the year 2004**
- ★ **Awarded by IBM Global Services as the “IBM Icon 2005” for the exemplary contribution towards the software business in the country.**
- ★ **IBM Award best Rational BP 2006 to 2008**





Solution Synopsis:

Most of the products of Tejas Networks are developed in JAVA™ technology, and they had to implement a testing solution which met past and future technology requirements. IBM ®Rational® Functional Tester was implemented to automate the regression testing at Tejas Networks. MicroGenesis played a key role in developing proxy for Rational® Functional Tester to support the custom controls used in Tejas' Products. POC's(Proof of concepts) and trainings helped Tejas gain confidence on the solutions and reduce the learning curve involved.

Client Background:

Tejas Networks is a leading enabler of high-performance telecom infrastructure by developing innovative carrier class communications equipment. Tejas pioneered the development of a strong portfolio of packet-ware optical transport products. Tejas Networks has witnessed enormous success in tackling the problems of efficiently aggregating bandwidth at the edge of the network, thereby offering substantial savings in capex and opex for its customers. Tejas has developed products that transition legacy networks into intelligent, Ethernet-enabled networks that can be used to offer many new revenue-generating, data services.

Business Need:

As a Product company, Tejas Networks has steadily increased their client base for their varied products, installations & different configurations. Their solutions needed to be supported, and the testing of these products was a formidable challenge in order to manage and meet the quality bar in all the products. Since there was a need for many regression tests to be run for different products on a regular basis, manual testing was a big challenge.

Solution Implementation:

Most of the products of Tejas Networks are developed in JAVA™ technology, and they had to implement a testing solution which met past and future technology requirements. IBM® Rational® Functional Tester was implemented to automate the regression testing at Tejas Networks. MicroGenesis played a key role in developing proxy for Rational® Functional Tester to support the custom controls used in Tejas Products. POC's (Proof of concepts) and training helped Tejas gain confidence on the solutions and reduce the learning curve involved.

Benefits of the Solution:

- **More regression tests were performed which helped manage product quality**
- **Reduction in testing time**
- **More tests helped better coverage**
- **Fewer bugs from the field**

Services:

- The installation & configuration of the software on the machines.
- Priority support calls when they face any issue.
- POC (Proof of concept) and Training
- Best practices implementation through consultative approach.

Key factors that led to the IBM sale

- **Support for Custom controls**
- **Java Scripting**
- **Ease of use**





Solution Synopsis:

IBM®Rational®Clearcase® & MultiSite® and IBM®Rational®ClearQuest® was identified to manage the large development team of more than 400 members, geographically distributed across different locations in a real-time environment. The entire team was trained to share and manage the source code using the tools effectively and there by reducing the learning curve. Continuous handholding and mentoring was provided for a smooth functioning of the system till it was stabilized.

Client Background:

Airvana provides network infrastructure products used by wireless operators to deliver mobile broadband services. These products, which are based on Internet Protocol technology, enable wireless networks to deliver revenue-generating, broadband-quality multimedia services to mobile phones, laptops, and other mobile devices.

Business Need:

With a 400 member development team distributed across different geographical locations, Airvana's products were developed across different locations. The challenge was to share and manage source code across this distributed development and also do real-time sync of code in different locations to keep all the locations up to date.

Solution Implementation:

IBM® Rational® ClearCase® & MultiSite®, ClearQuest® was identified as solutions to solve this critical problem of distributed development and manage the team more effectively. The entire team was trained to use the tools more effectively by reducing the learning curve. As part of support, continuous handholding & mentoring was provided for smooth functioning till it was stabilized.

Benefits of the Solution:

- **Managing distributed development teams was much easier**
- **Parallel development without any road blocks**
- **Continuous integration of software which was developed across different locations**

Services:

- The installation & configuration of the Software on the machines.
- Priority Support calls when they face any issue.
- Proof of Concept (POC) and Training.
- Best practices Implementation through consultative approach.





Solution Synopsis:

IBM® Rational® ClearCase® & MultiSite® - a scalable and capable solution from IBM Rational for globally distributed development was implemented at CDOT – Alcatel. Multisiting with two other countries was done to share common code base & regular sync between locations was put in place. MicroGenesis implemented the solution, configured the solution for various projects, deployed skilled man power to manage the setup and extended continuous handholding till the team was comfortable in handling the setup on their own.

Client Background:

CDOT Alcatel Research Center (CARC) is a Joint Venture between Alcatel-Lucent and the Centre for Development of Telematics (C-DOT), the Indian Government's telecom technology development center in establishing a global R&D center, dedicated to broadband wireless access.

Business Need:

CDOT Alcatel being a joint venture had a geographically distributed team for the development of next generation telecom products. The challenge was to have the solution for managing globally distributed development teams. India being the new setup, needed a strong solution and vendor to support the team during the setup.

Solution Implementation:

IBM® Rational® ClearCase® & MultiSite®, a scalable and capable solution from IBM Rational for Globally distributed development was implemented at CDOT – Alcatel. Multisiting word with two other countries were done to share common code base & regular sync between locations was put in place. MicroGenesis implemented and configured the solution for various projects deployed skilled man power to manage the setup and continuous handholding was provided till the team was comfortable in handling the setup on their own.

Benefits of the Solution:

- **A complex global distributed development was much easier to manage with the solutions provided.**
- **Reduction on total cost of ownership**

Services:

- The installation & configuration of the software on the Client & Server Machines.
- Priority Support calls when they faced any issue.
- Best practices implementation through a consultative approach

Key factors that led to the IBM sale:

Multisiting capability , scalability and performance.





Solution Synopsis:

IBM Rational ClearCase® & MultiSite®, ClearQuest® was identified as solution to solve this critical problem of distributed development and manage the team more effectively. The entire team was trained to use the tools more effectively by reducing the learning curve. As part of support, continuous handholding, mentoring was provided for smooth functioning till it is stabilized.

Client Background:

Continuous Computing is the only company deploying uniquely architected solutions comprised of telecom platforms and Trillium software. Leveraging more than 20 years of innovation, the company enables network equipment providers to rapidly deploy carrier-class Long Term Evolution (LTE), Deep Packet Inspection (DPI), and femtocell applications with reduced risk, cost, and complexity.

Only Continuous Computing combines open-standards platforms, Trillium protocol software, and expert professional services to create fully-integrated solutions that empower more than 150 customers worldwide to accelerate new product delivery and maximize return on investment.

Business Need:

Since the software development team of 100+ was distributed across different geographical locations and the products of Continuous Computing are developed across different locations. The challenge was to share and manage source code across this distributed development and also do real-time sync of code in different locations to keep all the locations up to date.

Solution Implementation:

IBM Rational ClearCase® & MultiSite®, ClearQuest® was identified as solution to solve this critical problem of distributed development and manage the team more effectively. The entire team was trained to use the tools more effectively by reducing the learning curve. As part of support, continues handholding, mentoring was provided for smooth functioning till it is stabilized.

Benefits of the Solution:

- **Managing distributed development teams was much easier**
- **Parallel development without any road blocks**
- **Continuous integration of software which was developed across different locations**





ANURAG

Advanced Numerical Research and Analysis Group

Solution Synopsis:

IBM Rational® Test RealTime, a cross-platform solution for component testing and runtime analysis designed specifically for those who write code for embedded, real-time, and other types of cross-platform software products. It provides users with Unit, Integration, Validation and Regression Testing. It automates code coverage analysis of embedded software by highlighting portions of code that have not been tested. It also gives memory leak detection and checks for performance bottlenecks. MicroGenesis a value added IBM Business Partner, has played a significant role in enabling the tool to suit the client's environment. Also, MicroGenesis helped client achieving expertise in Rational® Test RealTime within short span of time and enabled them to successfully test their application.

Client Background:

Advanced Numerical Research and Analysis Group (ANURAG) is a laboratory of the Defence Research and Development Organisation (DRDO). Located in Kanchanbagh, Hyderabad, they are involved in the development of computing solutions for numerical analysis and their use in other DRDO projects.

Business Need:

ANURAG required a case tool to test the applications running on an indigenous target board with Open Source RT Linux.

Solution Implementation:

MicroGenesis, a value added IBM Business Partner, has played a significant role in enabling the tool (i.e. Rational® Test RealTime) to suit the customer's environment and successfully test their application running on open source RT Linux.

Benefits of the Solution:

The ease of use, increased efficiency and productivity provided by IBM Rational® Test RealTime has enabled ANURAG to rapidly realize significant benefits in both requirements-based testing and structural coverage analysis, performance testing.

Services:

- MicroGenesis customized Rational® Test RealTime to test application by developing Target Deployment Port(TDP).
- Modification to the supplied TDP as per the application needs.
- Required training on usage of TDP developed.

Key factors that led to the IBM sale:

Reliability, ease of use, increased efficiency and productivity.





HBL Power Systems Limited

Solution Synopsis:

IBM Rational Test RealTime®, a cross-platform solution for component testing and runtime analysis designed specifically for those who write code for embedded, real-time, and other types of cross-platform software products. It provides users with Unit, Integration, Validation and Regression Testing. It automates code coverage analysis of embedded software by highlighting portions of code that have not been tested. It also gives memory leak detection and checks for performance bottlenecks. MicroGenesis played a significant role in enabling the tool to suit the client's environment. Also, MicroGenesis helped client achieving expertise in Rational Test RealTime®, within short span of time and enabled them to successfully test their application.

Client Background:

HBL started as HBL Power Systems Ltd and is the pioneer in the design, development and manufacture of specialized batteries and DC systems in India. With over three decades of experience in this field. HBL also serves the Railway and Defense services. HBL is a one stop shop for all railway signaling needs, starting from design, equipment supply to complete turnkey works contracts.

Business Need:

HBL RAIL, a unit of HBL Power Systems Limited is associated with the Indian Railways for over 25 years and has been a regular and approved supplier of Batteries, Power Systems and Electronic Signaling Products. HBL specializes cross platform testing solution which addresses the unit testing, memory leak detection, code coverage & system testing of their Real time & embedded custom software development environment.

Solution Implementation:

MicroGenesis, a value added IBM Business Partner, has played a significant role in enabling the tool (i.e. Rational Test RealTime®) to suit the client's environment. Also, MicroGenesis helped client achieve expertise in Rational Test RealTime®, within short span of time and enabled them to successfully test their application.

Benefits of the Solution:

The ease of use, increased efficiency and productivity provided by IBM Rational Test RealTime® has enabled HBL to rapidly realize significant benefits in both requirements-based testing and structural coverage analysis.

Services:

- MicroGenesis customized Rational Test RealTime® to test HBL's Railway Signaling Equipment application environment by customizing Target Deployment Port (TDP).
- Regular onsite services support while testing the application.
- Modification to the supplied Target Deployment Port as per the application needs.

Key factors that led to the IBM sale:

Testing and structural coverage analysis





Solution Synopsis:

IBM Rational Robot® was initially identified to address the need of test automation. MicroGenesis played key role in implementing IBM Rational® Functional Tester, a next generation test automation solution to address the ever changing technologies.

Client Background:

Huawei is a leader in providing next generation telecommunications networks. The company is committed to providing innovative and customized products, services and solutions to create long-term value and potential growth for its customers.

Business Need:

Huawei was an early adaptor of agile development into their environment and the key challenge here is quick turn around for all the activities across life cycle. The main challenge was to manage to regression testing for daily builds which they were getting from development team as part of delivery.

Solution Implementation:

IBM Rational Robot® was initially identified to address the need of test automation. MicroGenesis played a key role in implementing IBM Rational® Functional Tester, a next generation test automation solution to address the ever changing technologies.

MicroGenesis also took up the challenge to optimize the time take for regression tests. With its unique service, MicroGenesis was able to reduce the time taken and increase the productivity of the team. MicroGenesis helped the team in implementing the automated testing best practices and tool tips to use the solutions more optimally.

Benefits of the Solution

- Increased regression tests
- Reduced time spent on regression tests
- More coverage on testing
- Control of cost and schedule

Key factors that led to the IBM sale:

Control of cost and schedule





Solution Synopsis:

IBM Rational® Functional Tester was implemented for automating functional & Regression testing at Juniper. Since Rational® Functional Tester is built on Eclipse, Juniper developed a Testing Framework using this Rational® Functional Tester open environment to address the growing need of test automation. MicroGenesis helped the team to use the automation tool on customs controls which were part of the application under test. This helped the team improve the test coverage.

Client Background:

Juniper Networks is the leader in high-performance networking. Juniper Networks offers a high-performance network infrastructure. Juniper's networking solutions create a responsive and trusted environment for accelerating the deployment of services and applications over a single network.

Juniper Networks is well positioned to achieve continued growth in high-performance networking. The company has nearly 500 technology patents issued or pending and is committed to continued innovation, investing more than \$500 million in R&D in 2007. The company's business strategies, products and more than 5,000 dedicated employees are aimed at delivering value for customers and shareholders.

Business Need:

As a leader in providing networking solutions, and as part their expansion plan, India was considered to be the major development center apart from other geographical locations. To address the ever growing need of networking solutions and a very competitive market, it was very important for Juniper to adopt quick go-to market strategies with quality products. As a result of this approach many configurations of products needed to be tested quickly and regularly. The challenge was to automate the functional testing, and regression testing to reduce the time spent on testing and improve the quality.

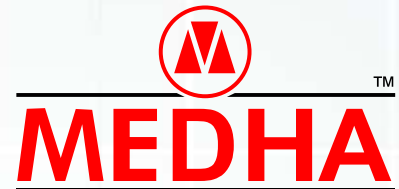
Solution Implementation:

IBM Rational® Functional Tester was implemented for automating functional & Regression testing at Juniper. Since Rational® Functional Tester is built on Eclipse. Juniper developed a Testing Framework using this Rational® Functional Tester open environment to address the growing need of test automation. MicroGenesis helped the team to use the automation tool on customs controls which were part of the application under test. This helped the team improve the test coverage.

Benefits of the Solution:

- **Test early and frequently**
- **More tests in less time**
- **Improved test coverage and manage quality**
- **Saving time and total cost of ownership.**





Solution Synopsis:

IBM Rational Test RealTime®, a cross-platform solution for component testing and runtime analysis designed specifically for those who write code for embedded, real-time, and other types of cross-platform software products. It provides users with Unit, Integration, Validation and Regression Testing. It automates code coverage analysis of embedded software by highlighting portions of code that have not been tested. It also gives memory leak detection and checks for performance bottlenecks.

MicroGenesis played a significant role in enabling the tool (i.e Rational Test RealTime®) to suit the client's environment. Also, MicroGenesis helped the client achieve expertise in Rational Test RealTime® within a short span of time and enabled them to successfully test their application.

Client Background:

Medha Servo Drives Pvt. Ltd. supplies its hi-tech systems to Railways. The company's vision is to be a "World Leader in Railway Products". It is following Quality Assurance system as per ISO 9001-2000 standard. Medha is adopting framework and is in transit from ISO to CMMI.

Business Need:

Medha specializes in designing and engineering products for application on locomotives, to withstand shock and vibration, wide temperature variations, and electrical disturbances present in the locomotive environment. Medha was looking for a complete cross platform testing solution which addressed the unit testing, memory leak detection, code coverage & system testing of their real time & embedded custom software development environment.

Solution Implementation:

MicroGenesis, a value added IBM Business Partner, has played a significant role in enabling the tool (i.e. Rational Test RealTime®,) to suit the client's environment. Also, MicroGenesis helped the client with achieving expertise in Rational Test RealTime®, within a short span of time and enabled them to successfully test their application.

Benefits of the Solution:

The ease of use, increased efficiency and productivity provided by IBM Rational Test RealTime®, has enabled Medha to rapidly realize significant benefits in both requirements-based testing and structural coverage analysis.

Key factors that led to the IBM sale:

- Ability to develop anytime, anywhere
- Predictable results
- Reuse of components
- Control and audit ability

Client Testimonial:

"The use of Rational Test RealTime® has given us a way of accomplishing what we needed to do. In one month with one person, I can do the work that required four people working three months. And the assets are reusable - for future regression testing, all I need to do is an overnight test run."





Solution Synopsis:

IBM Rational tools were utilized to consolidate the needs of different departments. A continuous hand holding helped National Aerospace Laboratories (NAL) not only implement Rational tools & best practices but also ensured that their people followed the same to improve further. Rational Doors® was used to capture all system & software requirements and the analysts were trained on Requirement Management through UseCases.

Client Background:

National Aerospace Laboratories (NAL), Bangalore is a constituent Institution under the Council of Scientific and Industrial Research of India. NAL is a high technology oriented institution concentrating on advanced topics in the aerospace and related disciplines. Originally started as National Aeronautical Laboratory, it was renamed National Aerospace Laboratories to reflect its major involvement in the Indian space programme, its multidisciplinary activities and global positioning. It is India's only civilian aerospace laboratory with a high level of competence and the expertise of its scientists is globally acknowledged.

Additionally, NAL has some sophisticated test facilities which are the best in the country and comparable to those abroad. 1.2 m Trisonic Tunnel Complex, Full Scale Fatigue Facility, Acoustic Test Facility, Engineer-in-Loop Facility, Composite Structure Facilities, Advanced Turbomachinery and Combustion Laboratories, Failure Analysis Laboratory and Electromagnetic Laboratory are among these. All these are manned by specialized teams who operate the facilities, conduct experiments, analyze the data and provide value added inputs to programs.

Business Need:

As part of addressing the new business opportunities with National Aerospace Laboratories' (NAL) products and its vast experience in India and abroad, NAL wanted to keep its focus on improving a standard process for development of software, and continuous improvement on the same. Using automated tools for Requirement collection, Design, Development and Testing was important to NAL to achieve improvement in quality and productivity. Faster time to market was another challenge that NAL faced.

Solution Implementation:

MicroGenesis played a key role in implementing IBM Rational tools by consolidating different department's needs. A continuous handholding helped National Aerospace Laboratories (NAL) not only implement Rational tools & best practices but also ensure that their people followed the same to improve further. Rational Doors® was used to capture all system & software requirements and the analyst were trained on Requirement Management through UseCases. Architects used Rational Rose RT® for designing the software and MicroGenesis trained the team on Modeling , configuration management & defect tracking. Rational ClearCase® & ClearQuest® was used to manage the Software Configuration and a plug-in to achieve the end to end traceability across software development life cycle.

MicroGenesis' continuous support was very critical for NAL to succeed in improving tool usage and in managing the growing team's requirement.

Benefits of the Solution:

- Implementation of standard process helped managers to manage complex projects and get visibility into the projects.
- Managing changing requirements was much simpler and team was aware of the change, impact analysis helped team in better estimation of time & cost.
- Traceability from requirement – design – testing.
- Effective PCR management - Improved software configuration Management.
- Development team empowered with state-of-the-art IBM Rational tools.

Key factors that led to the IBM sale:

End to end Traceability





Solution Synopsis:

MicroGenesis played a key role in implementing Rational® Unified Process by consolidating different department's needs, a continuous handholding helped BEL implement Rational tools & best practices and also ensured that its people followed the same to improve further.

Client Background:

Bharat Electronics Limited (BEL) was established at Bangalore, India, by the Government of India under the Ministry of Defence in 1954 to meet the specialized electronic needs of the Indian defence services. Over the years, it has grown into a multi-product, multi-technology, multi-unit company serving the needs of clients in diverse fields in India and abroad.

Bharat Electronics Limited offers products and services in a wide spectrum of technology like Radars, Military Communications, Naval Systems, Electronic Warfare Systems, Telecommunications, Sound and Vision Broadcasting, Opto-Electronics, Tank Electronics, Solar Photovoltaic Systems, Embedded Software and Electronic Components. With its expertise developed over the years, the company also provides turnkey systems solutions.

Business Need:

As part of addressing the new business opportunities with Bharat Electronics Limited's products and its vast experience in India and abroad, they wanted to keep the focus on improving a standard process for development of software, and continuous improvement on the same. Using automated tools for Requirement collection, Design, Development and Testing was important to Bharat Electronics to achieve improvement in quality and productivity. Faster time to market was another challenge that Bharat Electronics Limited faced.

Solution Implementation:

MicroGenesis played a key role in implementing Rational® Unified Process by consolidating different department's needs. A continuous handholding helped Bharat Electronics Limited to implement Rational tools & best practices and ensured constant improvement. Rational RequisitePro® was used to capture all the requirements and the analyst were trained on Requirement Management through UseCases. Architects used Rational Rose® for designing the software and MicroGenesis trained the team on Object-oriented analysis and design (OOAD) and Design Patterns. Rational ClearCase® was used to manage the Software Configuration and Rational Robot and Rational Test RealTime® for Testing.

MicroGenesis' continuous support was very critical for Bharat Electronics Limited to succeed in improving tool usage and in managing the growing team's requirements.

Benefits of the Solution:

- Implementation of standard process helped managers to manage complex projects and get visibility into the projects.
- Managing changing requirements was much simpler and the team was aware of the change, impact analysis helped team in better estimation of time & cost.
- Traceability from requirement – design – testing.
- Reduction on testing time.
- Development team empowered with state-of-the-art IBM Rational tools.

Key factors that led to the IBM sale:

End to end solution.





Solution Synopsis:

With its consultative approach, MicroGenesis studied the current environment and understood the need of sharing the code base with other countries and proposed IBM Rational's highly scalable Software Configuration Management solution i.e. IBM Rational ClearCase® & MultiSite® was implemented at Juniper. By choosing appropriate topology, the large amount of data was replicated across different geographically distributed setups. Regular synchronization between locations helped the teams share the data across in real-time.

Client Background:

Juniper Networks is the leader in high-performance networking. Juniper Networks offers a high-performance network infrastructure. Juniper's networking solutions create a responsive and trusted environment for accelerating the deployment of services and applications over a single network.

Juniper Networks is well positioned to achieve continued growth in high-performance networking. The company has nearly 500 technology patents issued or pending and is committed to continued innovation, investing more than \$500 million in R&D in 2007. The company's business strategies, products and more than 5,000 dedicated employees are aimed at delivering value for customers and shareholders.

Business Need:

As a leader in providing networking solutions, and as part of its expansion plan, India was considered as a major development center apart from other geographical locations. The challenge was to manage these Globally Distributed Development teams and solutions to support the growing team in India. Another challenge was to automate the functional testing, regression testing to reduce the time spent on testing and improve the quality.

Solution Implementation:

With its consultative approach, MicroGenesis, assessed the current environment and understood the need of sharing the code base with other countries and proposed IBM Rational's highly scalable Software Configuration Management solution - IBM Rational ClearCase® & MultiSite® was implemented at Juniper. By choosing appropriate topology, the large amount of data was replicated across different geographically distributed setups. Regular synchronization between locations helped team share the data across in realtime.

Benefits of the Solution & Business Results

- **Improved Communication among the distributed teams.**
- **Managing complex distributed development made easier.**
- **Saving time and reduced total cost of ownership.**





As the Innovator's Innovator[®], IBM is committed to helping companies thrive in an era of intense competitive pressure from all corners of the globe. So, when we see our clients changing the playing field and driving real business success, we want to give them a chance to spread the word.

It's a new business era. Everyone's talking innovation. It's no longer enough to offer unique products and services - now you have to create competitive advantage by doing business in a whole new way. You've got to be special.

Clients referred to in this book have demonstrated the special capabilities that make their organisations stand out from the crowd. These special IBM clients have leveraged IBM Rational software solutions and products for business innovation and competitive advantage. These clients are innovators and leaders and we are proud to share their success.

To participate in or learn more about becoming a referred client, please contact us at info@mgtechsoft.com

MicroGenesis TechSoft Pvt. Ltd.

#3001, 5th Cross, 12th A Main
HAL 2nd Stage, Indiranagar
Bangalore - 560 008, INDIA.
Phone: +91 80-25203826/27/ 41155901/902/903/904
Fax: +91 80-41522108



