

Encouraging the curious mind

From the dawn of existence, man has constantly been inventing items that would make his life all that much better. It's still going on nowadays as a result of research and development. The Multimedia Super Corridor (MSC) initiative is providing not only the conducive environment for information and communication technology (ICT) companies to thrive, but also the funding for R&D through the MSC R&D Grant Scheme.



Pak Mei Yuet, manager, Technology Policy and Research, MDC.

In 1743, Ben Franklin, world famous inventor most well-known for his kite flying experiment, chased a whirlwind on horseback during a storm for three-quarters of a mile just to learn more about storms. He predicted that a storm's course could be plotted and today, meteorologists continue to plot the courses of storms, although no longer on horseback, allowing us to avoid or prepare for these storms as they reach us. The conveniences that we take for granted today, such as the telephone and the electric lights, were all the results of curious minds that were constantly looking for a way to make things work better.

Inventions of yesteryear continue to serve us well either in their original form or even in modified or improved upon versions. Thomas Alva Edison, the celebrated Wizard of Menlo Park, himself boasting 1,093 patented inventions, improved upon Alexander Graham Bell's original 'electrical speech machine', which we know as the telephone. Telephones today come in all shapes and sizes, and perform a dozen or so functions that Bell probably did not even dream about. With Bell's original model,

there were no keys for you to dial the number you wanted, you had to get the operator to connect you. Today, the mobile telephone you carry in your pocket answers your calls for you when you're busy and takes a message!

New items are continuously being invented and existing products and services improved upon. It takes a lot of research and development (R&D) work to come up with the solutions. It takes time, and it costs a lot, too.

For a lot of companies without the mega bucks backing of an established organisation such as that of Microsoft and Intel, conducting R&D is very much a vicious cycle. In order to grow their company, they need to improve and increase their products and services offerings. And to do that, they need to conduct R&D. But R&D requires personnel, time and money that they are short of. So what can these companies, usually small and medium sized enterprises (SMEs), do?

Well, lucky for the MSC-status companies looking to do R&D, there is a financial solution that they can tap on as a privilege of being an MSC-status company. The MSC Research and Development Grant Scheme (MGS), is offered by the Ministry of Science, Technology and the Environment and managed by Multimedia Development Corporation (MDC).

MGS for R&D

The MGS was launched in October 1997 with an initial allocation of RM100 million under the Seventh Malaysia Plan (1995-2000) and the aim to support R&D activities within the MSC. So important is R&D in the eyes of the government that under the Eighth Malaysia Plan (2001-2005), the allocation for the MGS has been increased

to RM200 million. The MSC is truly serious in achieving its aims to cultivate and nurture a competitive cluster of local ICT companies into becoming world class over time.

The grant scheme is designed to assist local, innovative MSC-status companies and joint venture companies with at least 51 percent Malaysian ownership to develop multimedia technologies and applications that will contribute to the development of the MSC in the medium to long term.

As of August 13, 2002, the MGS Unit of MDC has received 132 applications and 62 have been assessed. Out of that number, 29 have been approved with a total funding amount of RM62.04 million. Of this amount, about RM31.35 million has already been disbursed.

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Datuk Arif.

The objectives of the MGS are to:

- Encourage R&D activities in the multimedia products and services, as well as their innovative use in the MSC;
- Stimulate R&D collaboration between international players with leading-edge technology and local companies, in particular the small and medium sized enterprises (SMEs) to eventually create competitive world class ventures;
- Support the development of Malaysian knowledge workers and productivity enhancement; and
- Commercialise the R&D results.

Research culture

MGS recipient companies undertake R&D in a variety of technology areas, from content to applications, to infrastructure through to specialised technologies. These

companies are involved in R&D in such activities as biometrics, speech technology, compression technology, wireless communications, optical networking and computer telephony. Some are into developing content for games, education and entertainment, while others are into business and engineering applications. To date, 13 MGS recipient companies have successfully completed their R&D projects. Two of them - Willoglen and PUC Founder - are also listed on the KLSE MESDAQ.

According to Pak Mei Yuet, manager for Technology Policy and Research of MDC, there are many more companies undertaking R&D activities in the MSC now. The MGS provides the financial support needed by many of the smaller companies to venture in R&D. As these companies may lack

internal resources and expertise to undertake R&D activities on their own, they are encouraged to collaborate and establish smart partnerships with universities and other companies.

The whole idea of the R&D Cluster Flagship is to create an innovative research culture in the MSC. R&D activities will flourish as world-class companies, MSC-status companies, universities and research institutions collaborate to produce more competitive products and applications in the MSC.

The MGS, which covers up to 70 percent of the R&D project cost, not only helps to reduce a company's R&D investment cost but also serves as a form of recognition and endorsement for the recipients. The grant reduces a company's

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reliance of third-party products and helps develop the critical skills needed to differentiate its products in the marketplace.

Heartening results

“When the MSC started off, R&D activities were rather limited but as time progressed, and through initiatives like the MGS and other activities, MDC has been able to successfully create the awareness and spur more R&D activities,” says Datuk Dr Mohamed Arif Nun, chief executive officer of MDC. Already there have been quite a number of patents created out of the MSC, as a result of grants given to the various companies.

He said that if you compare the numbers of patents generated per 100 R&D personnel in the country, then the MSC through its R&D Cluster Flagship, has successfully generated three times more patents than the whole country.

In addition to that, based on the latest impact survey results, it was found that R&D spending as a percentage of revenue in the MSC was about the same as that of world class ICT companies. This shows that it is on the right track in terms of the emphasis given to R&D activities in the MSC.

Furthermore, output from the R&D Cluster has already been commercialised. Many of the companies are now looking at venturing into the global market with the products that they have developed and produced within the MSC. Some have even secured significant orders or projects from overseas customers. Not only that, a couple of companies have even made IPO on the KLSE MESDAQ recently.

It is increasingly evident that Malaysian companies are starting to accept the culture of investing in R&D. They have come to realise that R&D is a long-term commitment that can be very rewarding eventually, unlike the old ways where businesses want to see a fast return of investment. “It takes a continuous effort on our part to inform and educate companies that by investing in R&D, they can create leading edge products which will help them compete in the world market,” says Datuk Arif.

With the availability of funding specifically for R&D for MSC-status companies, as well as the MSC’s efforts towards encouraging the culture of R&D in the country, we may soon find some ‘Ben Franklins’ and ‘Thomas Edisons’ showing themselves in the near future. ●

MGS Project selection criteria

Project Selection Criteria

- > R&D projects that are aligned with the MSC goals
- Potential impact on the success of the MSC.
- Linkages to local research institutes and leading companies
- Involvement of Malaysian knowledge workers in the R&D core team.
- Growth impact on SMEs.
- Potential contribution to the Malaysian economy.
- > Applicant’s institutional merits
- Top management’s commitment
- Company’s R&D track record
- Credentials of project leader and research team
- Company’s R&D portfolio
- > Commercialisation potential
- Commercialisation of products.
- Projected revenues based on research activities.
- Demand for the potential R&D output, the market size and growth
- Feasibility of commercialisation plan (e.g. project duration).
- Appropriateness of the business plan.

- > Technical merits
- Scientific merits of research objectives.
- Credibility of technological benefits.
- Technical methodology.
- Novelty, innovation, leading-edge technology.
- Appropriateness of risk assessment.
- Feasibility of research plan.

- > Financial Plan
- Integrity of cost estimates.
- Cost effectiveness of approach.
- Appropriateness of grant amount sought.
- Financial management capabilities and resources.

Funding

- The MGS will provide a grant of up to 70% of the total project cost. The amount of the grant approved will be determined by the merits of each case.
- Repayment is not required.

Disbursement Guideline

- Each project is funded for up to 2 years.



- Funding is only for project-related costs.
- An advance will be considered for initial set-up costs, including capital expenditure.
- Payments will be on a reimbursable basis.
- Disbursements are given on a quarterly basis upon receipt of the project progress report and certified statement of accounts.
- In situations where the project funding period needs to be extended, notification and justification has to be submitted 6 months prior to the end of the 2nd year ●