

Academic Program Life Cycle: A Redefined Approach to Understanding Market Demands

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Abstract

Education can develop intellectual capability in people, which may in turn lead toward development of a more humane society. Open and distance learning (ODL) has provided one means of achieving social objectives democratically. In India significant success has been achieved through a network of 10 open universities and 104 institutes of open and distance education (IODE). Challenge and competition in the education sector have presented a new situation where institutions are now viewed as conglomerates and educational programs as educational products. Established ODL institutions need to compete. The students are perceived as end users or customers in the emerging education market. Institutions require innovative marketing strategies in this highly competitive market for services, and these strategies depend on the stage of maturation of the educational programs in an academic program life cycle (APLC).

Résumé

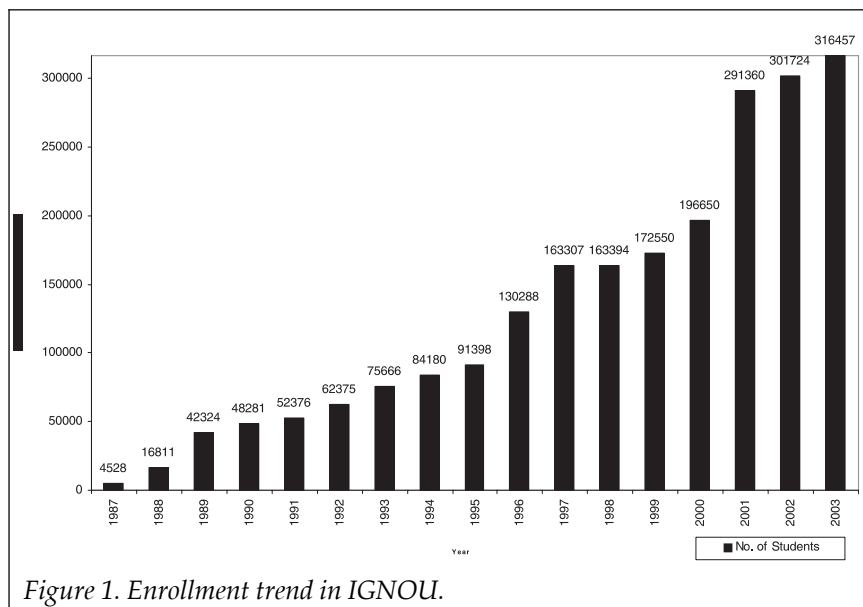
L'éducation peut développer des capacités intellectuelles chez les individus, qui peuvent, à leur tour, contribuer au développement d'une société plus humaine. L'enseignement à distance a constitué un moyen d'atteindre des objectifs sociaux de façon démocratique. En Inde, des succès importants ont été obtenus par le biais d'un réseau de dix universités à distance et de 104 instituts d'enseignement à distance. Le défi et la compétition dans le secteur de l'éducation engendrent une nouvelle situation dans laquelle les établissements sont maintenant vus comme des conglomerats, et les programmes d'enseignement comme des produits d'enseignement. Les établissements de formation à distance établis doivent affronter la concurrence. Dans ce marché de l'éducation en émergence, les étudiants sont perçus comme des utilisateurs ou des clients. Les établissements doivent avoir recours à des stratégies de marketing innovatrices pour conquérir ce marché de services hautement compétitif. Ces stratégies dépendent du niveau de maturation des programmes d'enseignement dans le cycle de vie des programmes pédagogiques.

Education is seen as a key element for enriching and humanizing society. Through education and the media, various segments of society become aware of the possibility of better living standards and improved quality of life. As a result, certain sections of society can be seen as *progressive* and

strive to further ameliorate their own living standards, but renewed attention needs to be focused on those sections of society that are still experiencing deprivation. There is a need to accelerate the process of education and development for those most in need by providing access and equity in education to them, that is, the marginalized and disadvantaged segments of society. This is the central challenge of distance education in a country like India. The dream of reaching the unreached has been realized in part in developing countries such as India by establishing a wide network of distance education institutions that offer various quality education programs through open and distance learning (ODL).

Changing Perceptions of the Distance Education Sector

With the rise in the number of learners and increased numbers of ODL institutions in India, the ODL sector is in the transient phase of development that began with the opening of the first correspondence course institute in 1962. Now there are one national open university, the Indira Gandhi National Open University (IGNOU), and 10 state open universities. Besides these organizations, there are 104 other IODE institutions that are also offering a portfolio of academic programs and courses by distance. These vary from six-month certificate doctoral-level programs (DEC, 2004). The growth in enrollment at IGNOU, which inducted the first batch of distance learners in 1987 (Reddy Lakshmi, 2002) and has now become the world's largest open university in terms of enrollment (IGNOU on Top, 2003), tells its own success story.

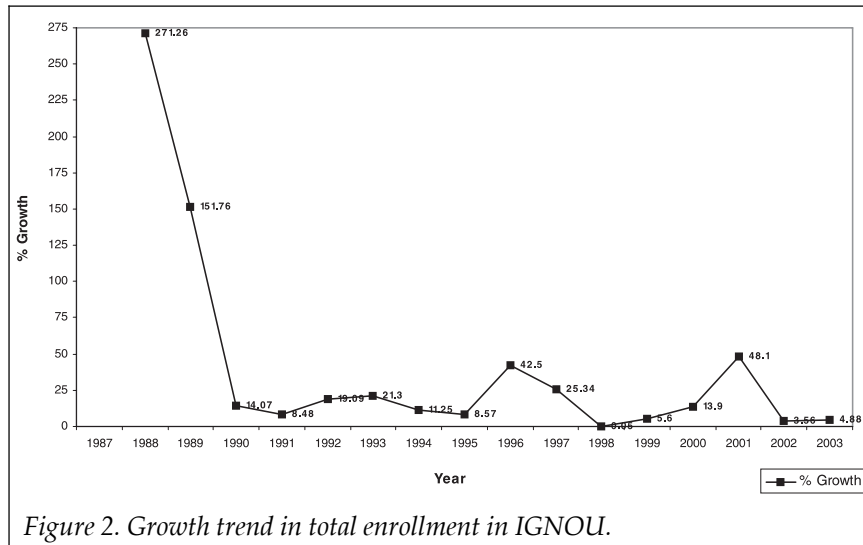


Because of the burgeoning demand for education, the distance education sector in India is now in stiff competition wherein ODL institutions are each trying to secure a sustainable market share of distance learners. Only those institutions that not only maintain the quality of academic programs but also fill the gap by launching innovative education, training, and skill development programs for unreached segments of society will survive.

The growth trend in total enrollment in IGNOU is shown in Figure 1. In 1988 this university had a total fresh enrollment of 16,811, with a growth rate of 271.26%, which declined to 3.56% in 2002 and increased marginally to 4.88% in 2003. Although IGNOU has seen a considerable increase in fresh enrollment from 4,528 (in 1987) in two academic programs—Diploma in Management (DIM) and Diploma in Distance Education (DDE) (Reddy Lakshmi, 2002)—to 316,457 (in 2003) in 78 programs (IGNOU, 1998-2003), this has been at the diminishing rate of growth shown in Figure 2, which indicates strong competition and market forces.

Academic Program Life Cycle (APLC)

With the present state of competition, distance education institutions need to rethink their strategies for ensuring adequate reach and greater acceptability in their markets. We perceive that the education sector as a whole needs to be considered as a complex market where academic programs are its educational products, students are its end users or customers, and ODL institutions are the conglomerates. Every educational product, like any other product, has its product life cycle (PLC) spanned in four stages beginning with introduction, followed by growth, maturity, and decline



stage, and each stage has a different marketing strategy. This life cycle could be termed the Academic Program Life Cycle (APLC, see Figure 3).

Four items are meant when we say that an academic program has a life cycle. These are: (a) any program has a limited life; (b) the popularity of a program passes through distinct stages, each posing different challenges to the ODL institution; (c) the revenue earned rises and falls at varying stages of the PLC; and (d) programs require varying marketing, financial resources, developmental processes, design services, and personnel strategies. Fundamentally, the shape of the curve in APLC is like the letter S.

Stages of S-Shaped APLC

A typical academic program follows an S-shaped curve, which is divided into four stages.

1. *Introduction*. This is characterized by a period of slow enrollment growth as the academic program is introduced into society by the ODL institution. Profits (net revenue contributions to the operating budget of the ODL institution) are nonexistent in this stage because of the heavy expenses of launching the program.
2. *Growth*. This is a period of rapid acceptance of the program in society and substantial profit improvement.

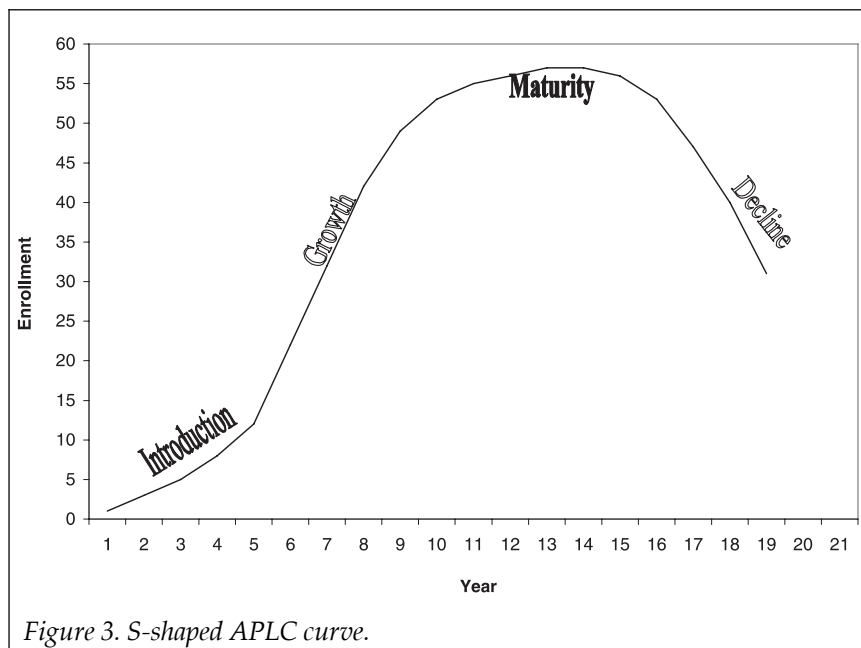


Figure 3. S-shaped APLC curve.

3. *Maturity.* In this period there is a slowdown in enrollment growth because the program has achieved acceptance in society. Profits accrued from the program stabilize or decline because of increased marketing outlays to defend the product against competition from other ODL institutions or because of rising costs.
4. *Decline.* This is when enrollment shows a strong downward drift and profits erode.

Specifying where each stage begins can be somewhat arbitrary. Usually the stages are marked where the rates of enrollment growth or decline become pronounced. However, the PLC may vary from an academic program to another depending on the popularity and longevity of the program. Most of the educational programs pass through these four stages as determined by their level of enrollment.

We study this changing concept here taking into account the six most popular academic programs (in terms of fresh enrollment) of IGNOU: Bachelor's Preparatory Program (BPP), Bachelor of Arts (BA), Management Program (MP), Certificate in Computing (CIC), Bachelor of Computer Application (BCA), and Master of Computer Application (MCA). These academic programs were selected for this study because the composite share of enrollment of these programs in total fresh enrollment is in the range of 50-60% (from 1997 to 2001) and 30-40% (from 2002 to 2003) of all enrollments at IGNOU. These programs have been also selected keeping in view their popularity and longevity. The MP, BPP, and BA pro-

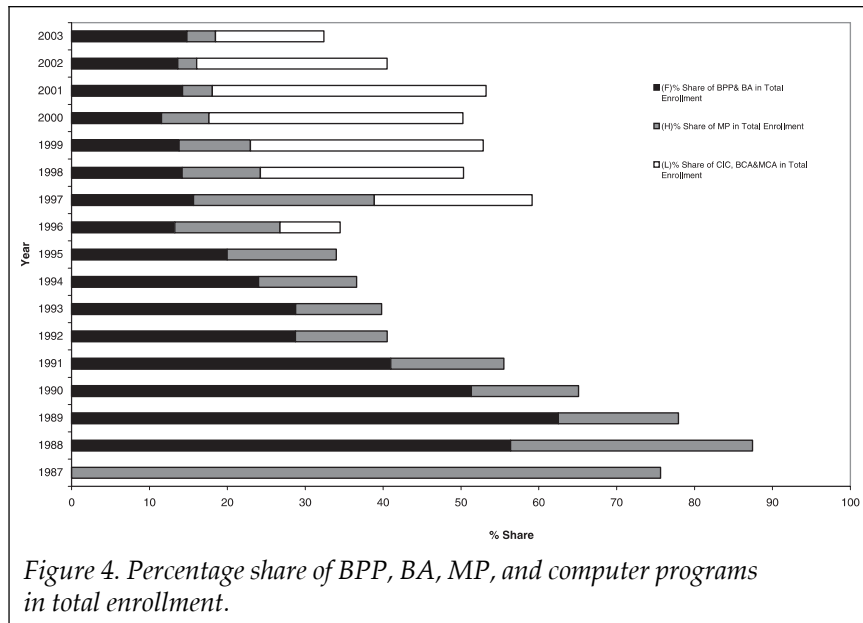


Figure 4. Percentage share of BPP, BA, MP, and computer programs in total enrollment.

grams started in the late 1980s and are still popular with the target group, whereas computer programs (CIC, BCA, and MCA) were launched by the university in the mid-1990s and have occupied a major proportion of the total enrollment compared with other categories of academic programs. Figure 4 illustrates the percentage share of these six programs in the total enrollment of the University.

The life cycles of the above-mentioned academic programs are analyzed here with the help of their PLC charts and their enrollment from the year of their inception to date.

APLC of Management Program

The APLC of the management programs was designed considering two variables, that is, year of enrollment on the X-axis and total enrollment in this program in the corresponding year on Y-axis. As can be seen from Figure 5, the shape of the curve is like a *Style Curve* in which a Style exhibits a cycle showing several periods of renewed interest (Kotler, 2002). Figure 5 shows that initially when the program was started in 1987, the portfolio of this program had only one diploma program, a six-month Diploma in Management. Gradually other postgraduate diplomas were introduced in management, that is, marketing, finance, and human resources in 1990 and operations in 1993. In 1991 a fully fledged Master in Business Management (MBA) was launched in the same portfolio, which aroused the interest of the target group and led to a peak in enrollment in these management programs (37,899 in 1997) while passing through the growth stage. Gradually the enrollment declined and reached a steady state in the past nine years, that is, 7,359 in 2002. From 2003 onward the program shows a renewed interest of the target group with an increase in

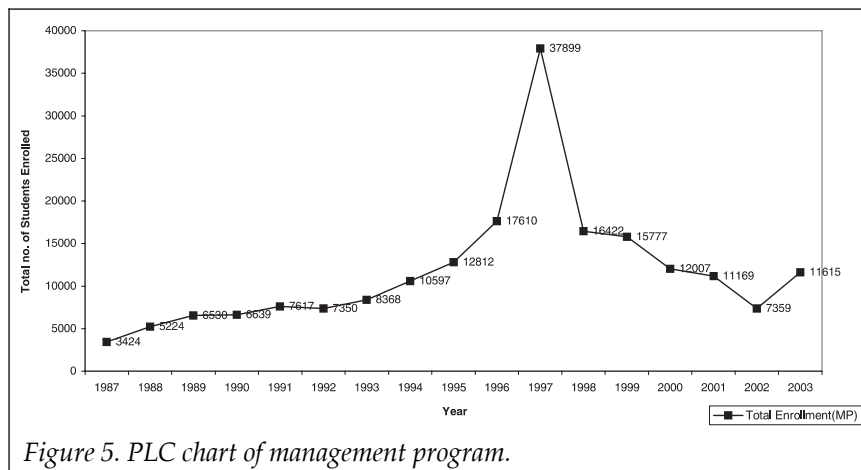


Figure 5. PLC chart of management program.

enrollment to 11,615. Thus the shape of the graph is similar to the Style curve.

APLC of Bachelor's Preparatory Program (BPP)

The APLC of BPP is not a typical S-shaped curve because it follows a different life cycle pattern characterized by a rise and fall of enrollment depicted by small humps in the cycle. This pattern of APLC is known as the *cycle-recycle* pattern shown in Figure 6, with the recycle normally having a smaller magnitude and duration than the primary cycle. The second hump in the enrollment is caused by an upward push in the decline stage.

The APLC of BPP is shown in Figure 7 by two variables, total enrollment of students on the Y-axis and the year of enrollment on the X-axis. This program was launched in 1988 with an enrollment of 9,474; the following year (1989) saw a rise in enrollment to 16,920, but this trend did not continue, and from 1990 onward it declined, and in 1992 the number of students admitted was 7,664. This is the primary cycle, however; the following year saw a rise, that is, a second hump in enrollment. It again dipped in 1996 to an all-time low of 7,461. So it is apparent from the chart that the APLC of BPP has been a typical cycle-recycle pattern.

APLC of Bachelor of Arts Program (BA)

The first intake of learners admitted to the BA program in 1989 numbered 9,534. In general the students are admitted to this program in two ways: first, by direct admission of all who have successfully completed their senior secondary (10+2); and second, through BPP comprising all can-

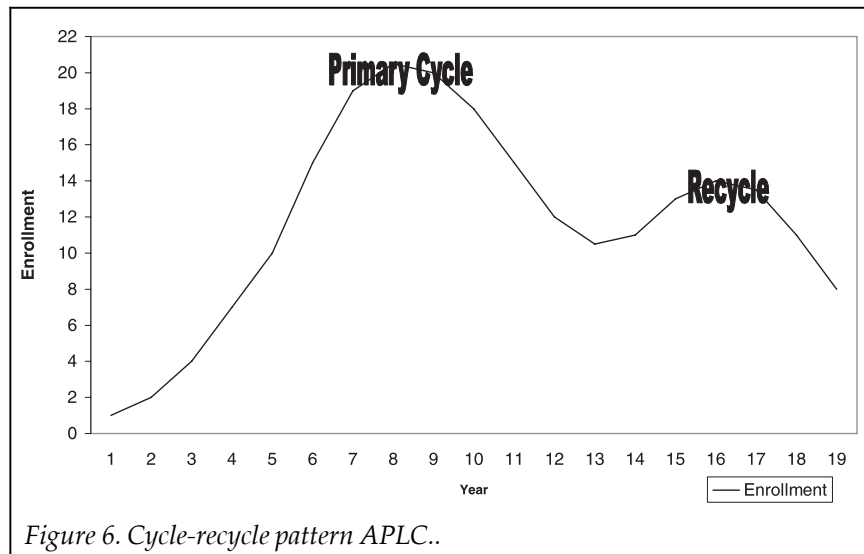


Figure 6. Cycle-recycle pattern APLC..

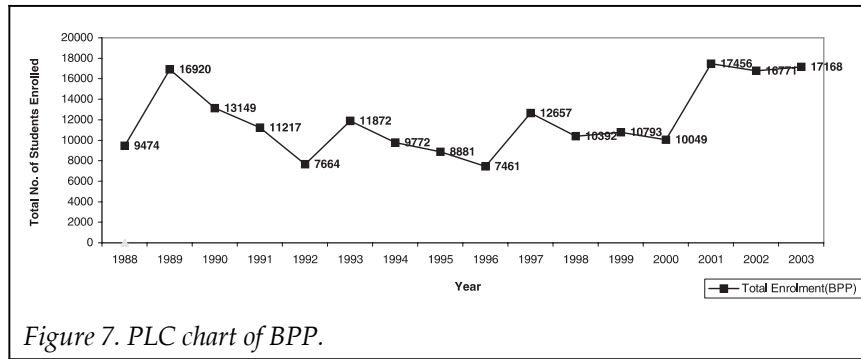


Figure 7. PLC chart of BPP.

didates who have attained the minimum age of 18 years. The enrollment pattern of this academic program shows that this program follows an S-shaped APLC curve, and at present the program is in the third—maturity—stage of the life cycle. The fresh student strength has been more or less stable, with a gradual rise from its inception or introduction to the present stage when enrollment stands at 29,710. The pattern is illustrated in Figure 8.

APLC of Certificate in Computing Program (CIC)

The six-month Certificate in Computing program was launched by the university in 1996 with the aim of providing an opportunity for adults to become computer-literate, with suitability for admission to the BCA and MCA programs at the university depending on the candidate's prior qualifications. At its inception it had an enrollment of 7,381, and thereafter enrollment continually rose, reaching a pinnacle in 1991 when it reached 51,281. This has been followed by a sharp decline, with the enrollment dipping to 13,558 in 2003. These figures demonstrate that this program also is following the S-shaped pattern of life cycle and currently is in the decline stage as shown in Figure 9.

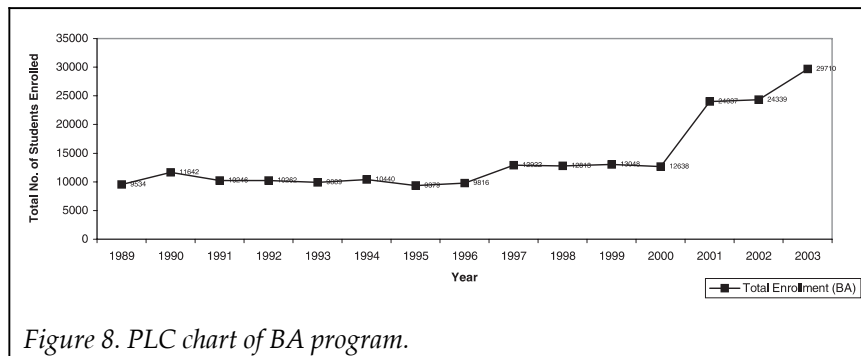


Figure 8. PLC chart of BA program.

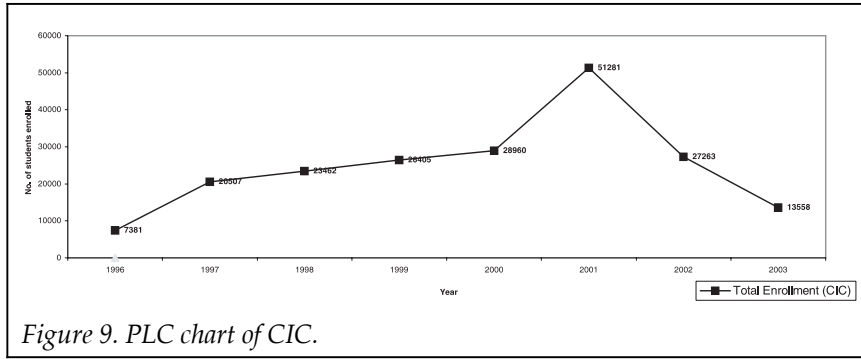


Figure 9. PLC chart of CIC.

APLC of Bachelor of Computer Application Program (BCA)

The year 1996 saw the introduction of yet another computer program by IGNOU in addition to the CIC. It launched a fully fledged undergraduate degree program known as a Bachelor’s Degree in Computer Application (BCA) for students who wished to make computing their career. At the initial launch stage enrollment was 2,661, which gradually increased year by year and reached a high of 30,906 in 2001. However, subsequent enrollments started showing a downward turn, and in 2003 it was 15,215. As in the case of CIC, the APLC chart of BCA is an S-shaped curve, with the program currently in the decline stage. This can be seen in Figure 10.

APLC of Masters in Computer Application Program (MCA)

A year after launching the BCA, the university offered a three-year postgraduate degree program in computer applications called the Master in Computer Application (MCA). At its inception in 1997, this program had only 329 students. From then on the enrollment increased, and by 1998 it was 4,435. The following session (1999), it almost doubled to 8,540 and in 2000 and 2001 the number of students admitted were 16,678 and 20,246 respectively. Thereafter, the program started showing signs of decline, and in 2003 it was at 15,267. Undoubtedly the life cycle of this program is

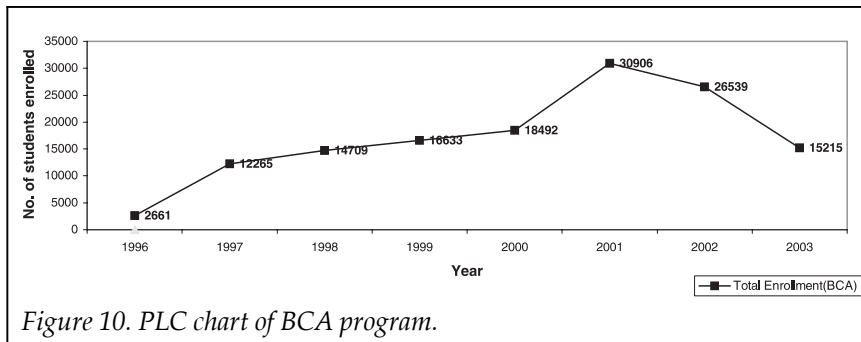


Figure 10. PLC chart of BCA program.

also in its decline stage, and the enrollment trend shows that the curve in this case is also S-shaped as shown in Figure 11.

The analysis of the APLCs of these programs makes clear that four of the six popular programs have S-shaped life cycle charts in which three programs are in their decline stage. This stage is generally characterized by a gradual fall in enrollment, a decline in expenditure on learner support services, and in the share of the fees of these programs in total fees collected declining.

Another aspect worth noting is the state of competition among the ODL institutions that offer computer programs. Apart from IGNOU, if the other ODL institutions are also in the same stage of APLC for these programs, this demonstrates that the intensity of competition is declining, and this is leading to a reduction in the number of competitors because they would be gradually phasing out from the market related to these computer programs. The fourth program with an S-shaped curve is in its maturity stage, which is featured by a slowing of the rate of growth of enrollment in this program, thereby creating overcapacity in the market, which leads to intensified competition, the share of fees in total fees collected remaining relatively stable, and reduced expenditure on learner support services.

The life cycle charts of the remaining two programs are of the cycle-recycle pattern and Style patterns. In the former the growth of enrollment varies from year to year, which affects the expenditure on student support services. It would, however, remain at an average level. The share of fees in total fees collected would also remain stable, because the increase in enrollment for one year would compensate for the drop in enrollment the previous year. The Style pattern, however, is different: the growth of enrollment is high during the maturity stage, but it falls thereafter and then again increases as learners' interest is renewed. The share of fees of these programs in the total fees collected declines with the fall in enrollment, but again begins to rise with the renewal.

From the analysis presented here it can be said that the APLC concept could be a useful tool for devising adequate and effective marketing

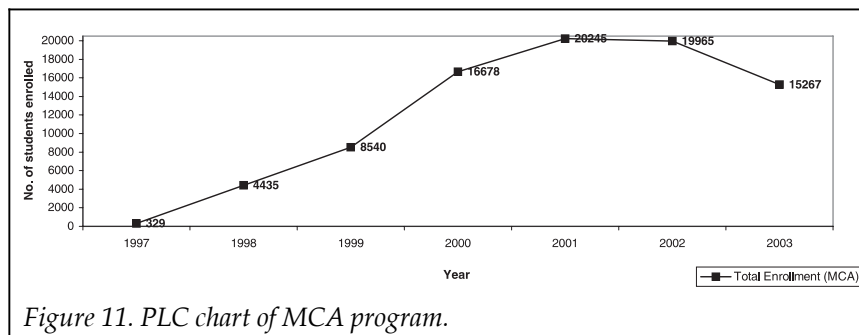


Figure 11. PLC chart of MCA program.

strategies for academic programs that are in various stages of the life cycle. Below we suggest suitable strategies for these programs that are in varying stages of life cycle with diverse APLC chart patterns.

Strategies for Enhancing Sustainability of Academic Programs

The above study reveals that although four programs have S-shaped APLC, one has cycle-recycle APLC and another has Style-patterned APLC. Because these programs are in varying stages of their product life cycle, there is a need to formulate and adopt varying marketing strategies in order to have a competitive edge over other ODL institutions.

Strategies for programs in the decline stage

The strategies in this stage of APLC need to be formulated with a view to fulfilling two objectives: (a) to arrest further decline in enrollment and maintain a constant rate of enrollment in these academic programs; (b) to convert the S-shaped curve to a cycle-recycle curve, that is, to introduce features that would add value to the program and may help to develop renewed interest in potential learners. Marketing theory (Kotler, 2002) suggests that product sales will improve when the economy improves, when the marketing strategy is revised, when the product is improved, or as a result of some combination of these factors. Alternatively, a weak product may be retained because of its alleged contribution to the sale of other products of the organization. One more option is that its revenue may cover out-of-pocket costs of the program, and the organization has no better way of using the money. Unless there are strong reasons for retaining it, carrying a weak product can be costly for any organization. There is a need to rethink and revise strategies for rejuvenating and reviving products that are in the decline stage. These strategies could be as follows.

1. If enrollment is too low, student support services for the respective academic program should be restructured; for example, the respective school should take responsibility for management of services.
2. Restructure the fees for the program, that is, increase or reduce the program fees according to its popularity.
3. Gradually deactivate the program from all study centers or program study centers where either the enrollment is low or there is no enrollment, that is, phase out selectively.
4. Value additions, that is, revise and update the program curriculum according to the requirements of changing employment markets and industry requirements so that learners can successfully face the job challenges.
5. Improve the learner support services and highlight these improved services in program information booklets.

Strategies for programs in the maturity stage

The maturity stage for academic programs can be divided into three phases. In the first, growth maturity, the enrollment growth rate starts to decline because of distribution saturation through the study centers. There are no new study centers for recruitment although some learners are enrolled in the program. In the second phase, stable maturity, enrollment levels on a per-capita basis because of market saturation. Most potential learners have completed the program, and future enrollment is governed by the growth need of the population for knowledge upgrading. In the third phase, decaying maturity, the absolute level of enrollment starts to decline, and the students start moving toward other programs and substitutes. The market strategies accordingly could be as follows.

1. The distance education institutions (DEI) can try to generate interest in that part of the market segment that until now was not interested in enrollment by demonstrating the benefits to learners of completing this program.
2. Institutions could enter new geographic and demographic segments by studying the behavior of the target population.
3. Modify the program characteristics so as to attract potential candidates according to the requirements of the target groups.
4. Relaunch of the academic program by value addition.
5. Restructure the fees to match or beat the competitors.
6. Widen the study center network for these programs by opening new centers or activating these programs in the existing study centers.
7. Stress the benefits and competitive advantages of these programs as compared with similar programs of other DEIs and build strong service differentiation that can generate a better image of the DEI and the program in the minds of the target group and thus secure a better market position.

Strategies for programs following the cycle-recycle pattern

The program whose life cycle shows the cycle-recycle prototype requires a promotional push to end the decline stage of the primary cycle and start with a growth stage in recycle. The promotional means for an educational program in this situation may be as follows.

1. Redesigning the support services by adding the latest advancements in the field of information and communication technology (ICT).
2. Revising the syllabus of the academic program to make it more student-friendly and on a par with the latest market demand.
3. Changing the fee structure. The initial fee for the first year or first semester (for the program of more than one year of academic calen-

dar) may be less, and fees for subsequent semesters can be increased so that overall total fees remain the same.

4. Program differentiation. The institutions should devise their publicity to show that their program is different from the academic programs of other institutions. The significant features that are lacking in the programs of other institutions should be highlighted to attract and retain students.

Strategies for programs following the Style pattern

The Style pattern shows the current trend in demand in the market. Hence the education program falling into this pattern should be renewed and redesigned with modifications to make it catch the attention of the target group. In our analysis the management program shows the Style pattern, hence suggestive strategies for the program would be as follows.

1. Revise the course content to match the standards of management programs offered by professional institutions.
2. Change the profile of support services for management programs. More emphasis on group discussions, panel discussions, and seminar presentations would enrich the academic program.
3. The university-industry linkage should be activated. The success of the management program depends on the placement of students in industry. Efforts for placement of students of the management program should be initiated.

Conclusion

For well-established distance education institutions, the increasing numbers of distance education institutions offering a whole range of programs have resulted in intensification of competition, rising costs, stagnation of service quality, and loss of market share. Simultaneously, although the size of the target group is growing and there is a rise in the demand for educational programs, the number of learners enrolled in these programs is falling. This is the time to rethink strategies for reaching segments of society to reposition the educational product and to create an awakening in the market. A sophisticated market analysis involving intensive research and needs analysis is required in order to comprehend the behavior of the target population and to achieve the objective of reaching the unreached by delivering the programs through a mix of services that are desired by customers and are effective against competitors.

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