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# **Population Studies at a Distance : A Case Study of Success within Dual-Mode Teaching at IIPS in India**

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#### **ABSTRACT** :

This paper investigates various aspects of the teaching programme related to Population Studies through distance education at the International Institute for Population Sciences (IIPS), Mumbai, an established dual-mode university in India. IIPS initiated its distance education programme leading to a master's degree in Population Studies during the academic year 1994-95. The data for the present study have been collated from the students' records. It was found that the males constituted two-thirds of the students, and more than half the students on the course were above 30 years of age. Three of four students have stated that their motivation for doing the course was to acquire knowledge and skills in the discipline of Population Studies which is an application-oriented subject receiving increasing demand and support from those working in various governmental and non-governmental organizations throughout India. Trend analysis found that this course has now reached steady high proportions of women and of younger students, and these trends may increase in future. These current findings were attributed to the course offering open access and being provided at a distance. Furthermore, this study demonstrated that the course is attracting distance learners from all regions across India and is bridging the traditional boundaries of the conventional education system.

#### 1. INTRODUCTION :

Distance education is a generic term and includes a wide range of teaching-learning strategies. It is known by a variety of names such as 'home study' at the further educational level and as 'independent study' at the higher education level in the United Sates; as 'external studies' in Australia; 'outreach,' 'extra-mural system,' and 'off-campus programme' in some countries. Distance education is referred to 'teleenseignment' as in French, 'Fernstudium' in German, 'education a distancia' in Spanish, and as 'teleducacao' in Portuguese. In India, distance education opportunities at the university level have increased enormously. Worldwide trends towards distance education are putting new pressures on the conventional educational system.

The distance education programme in various higher educational institutions was started with the introduction of social sciences. This system of education intends to impart education among the working people who look for future opportunities to widen knowledge as well as better placements but unable to spend time on regular study. The students of distance education programme were mostly depending on self-study with little or no efforts of the teachers, as the courses were mostly theoretical-oriented social sciences. But in course of time, the modern education and communication technologies enabled the higher education institutions to provide distance education even for the subjects requiring short-spanned classroom set-ups and laboratory or field exercises like Demography, Computer Applications, Management Studies, and Health Sciences.

Distance education has become a highly welcomed step in the direction of taking education to the door of those willing to acquire education but are unable to do so owing to lack in resources or to paucity in time.

The first experiment on open learning in the field of higher education was made in 1982 in Andhra Pradesh. After that planners in India decided to launch a full-fledged open learning system in the country. As a result, Dr. B.R. Ambedkar Open University came into existence in 1982 followed by the Indira Gandhi National Open University System in 1985. The first decade of the open university system in India was essentially devoted to establishing a broadbased, acceptable and a viable system. Takwale (1996) stated, "through innovation, the open university system adopted many features and reforms that the formal system had struggled over two-three decades to absorb, often with little success." Distance education simply and somewhat broadly can be defined as "education which either does not imply the physical presence of the teacher appointed to dispense it in the place where it is received, or in which the teacher is present only on occasions or for selected tasks." Distance education methods can be successfully used for catering to groups who for geographical, economic or social reasons are unable or unwilling to make use of traditional (class-room based) provision. In doing so, they can liberate the student from constraint of space, time, and age.

The open learning systems have important features like relaxed and flexible entry rules, individualised study, and specially prepared course materials for specified target groups. The counselling and use of audio-video materials have provided clarity and depth to various programmes of study. Further the use of electronic media had provided additional advantages to its programmes. With these qualities, the institutions of open learning are trying to reach a large number of learners related to various echelons of the society. Further the fee for the programmes is on the lower side in comparison to formal systems of education. For Indian society, which has a large section of its population who are poor,

the programmes of open learning are easily affordable. It is only people at large who have to show their willingness for the programmes.

Moore (1983) opined that all approaches to define distance education have focussed on two dimensions, i.e., the distance between the learner and the teacher and the structural dynamics of the teaching-learning programme. Peters (1983) defines distance education as "a method of imparting knowledge, skills and attitudes, which is rationalised by the application of division of labour and organisational principles as well as the extensive use of technical media, especially for the purpose of reproducing high quality teaching materials which makes it possible to instruct greater number of students at the same time wherever they live. It is an industrialised form of teaching and learning." Keegan (1980) has proposed a synthetic approach and has mentioned that the distance education should have the following main characteristics: (1) the separation of teacher and learner which distinguishes it from face-to-face study; (2) the influence of educational organisation which distinguishes it from private study; (3) the use of technical media; (4) the provisions of two-way communication so that students may benefit from even initiate dialogue; (5) the possibility of occasional meetings for both didactic and socialisation purposes; and (6) the participation in an industrialised form of education, which if accepted, contains genus of radical separation of distance education from other forms.

The International Institute for Population Sciences (IIPS) http://www.iipsindia.org was established in Mumbai initially as the Demographic Training and Research Centre in the year 1956, under the joint sponsorship of the Government of India, the United Nations and Sir Dorabji Tata Trust with the objective of providing training, research and consultative assistance in the area of Population Studies for the countries of ESCAP region.

The Institute has been the premier institution in the ESCAP and SAARC region recognized by the United Nations to provide intensive and need based training in

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the field of population data analysis and interrelationship between population and development. The Institute adopted its present name, International Institute for Population Sciences on 6 March 1984, in view of the multidisciplinary nature of the subject and the international scope of its activities. The Institute was declared as a 'Deemed University' on 15 August 1985 by the Ministry of Human Resource Development, Government of India. It is the only Institute of its kind in the world with a university status, wholly devoted to teaching and research in Population Studies. The Institute has its own regular full-time academic programmes such as Diploma in Population Studies (DPS), Master in Population Studies (MPS), Master of Philosophy (MPhil) in Population Studies, and Diploma in Health Promotion Education (DHPE). The Institute also deals with research activities in population studies and related subjects. In view of the growing demand, the Institute started a distance education programme leading to MPS degree with all its rigors of the regular programme from the academic session 1994-1995. The programme reaches out to a large number of government / nongovernment professionals involved in health, family planning and other population related programmes at various levels, who can be trained without dispensing from their duties. In addition, the programme is also devised to cater to the training needs of students and professionals from various ESCAP/SAARC and other countries on population sciences.

Since its launch, the programme has already completed a decade of academic activities. Hence, it is felt that this is right time to examine the various aspects of the programme including its management and delivery system and the steps taken to assure the quality of the programme. It will also be important to examine the profile of distant learners opting for the programme.

This paper is divided into two broad sections. The first section discusses the key quality assurance features of the programme, and the second section deals with the profiles of the students enrolled in the programmes.

### 2. METHODS :

2.1 The Self-Instructional Materials :

The department of Extra-Mural Studies and Distance Education (EMS & DE) at the Institute is responsible for running the MPS course in Population Studies through distance education. The self-instructional materials are prepared by the department in consultation with subject experts and the regular faculty members of the institute. The faculty members of the institute develop the basic study materials in their specialized area, and the same is edited in the department within the stipulated time. The draft materials are sent to subject experts for peer review. On receipt of suggestions and comments from experts, the department in consultation with faculty member of the Institute edits the materials. Then the material is subjected to final formatting and processing in MS Word format in the Extra-Mural Studies & Distance Education (EMS & DE) department. The department also takes the responsibility of revising and updating the self-instructional materials from time to time. The department has already revised and updated the self-instructional study materials for four times during the last thirteen years. The regular revisions and updating of self-instructional study materials also point towards the commitment of the department in imparting quality education through distance education mode. The most recent revision (4<sup>th</sup> edition: 2004-05) of self-instructional study materials covers 14 major topics comprising of 33 booklets devoted to discussion of various topics (Table 1).

# 2.2 The Delivery System :

The self-instructional study materials are generally sent to the students in three lots by registered post. Along with the selfinstructional materials, assignments on each course are also sent to the students. Students are encouraged to send the completed assignments as early as possible and preferably before writing in the examination. A student can attend examination only after the submission of the assignments. Then the faculties of the

| Торіс  | Booklet Title covering the Topic |   |  |  |
|--|----------------------------------|---|--|--|
| Statistical Methods  | Block 1                          | Basic Mathematical Tools in Population Studies  |  |  |
| for Population Studies   | Block 2                          | Basic Measures of Statistics, Elements of Probability<br>Theory and Probability Distributions |  |  |
|  | Block 3                          | Statistical Methods used in Population Data Analysis  |  |  |
|  | Block 4                          | Sampling Design and Statistical Inference   |  |  |
| Social Sciences Concepts and<br>Some Issues in Indian Society, | Block 1                          | Anthropology, Sociology, Psychology<br>and Some Issues in Indian Society and Culture          |  |  |
| Culture and Economy  | Block 2                          | Economics and Some Issues in Indian economy   |  |  |
| Introduction to Population<br>Studies                          | Block 1                          | Introduction to Population Studies and Sources<br>of Population Data.                         |  |  |
|  | Block 2                          | Age-Sex Structure, Evaluation and Adjustment  |  |  |
| Nuptiality and Fertility                                       | Block 1                          | Nuptiality: Concepts & Measures   |  |  |
|  | Block 2                          | Basic Concepts and Measures of Fertility  |  |  |
|  | Block 3                          | and Reproduction<br>Framework for and Synthesis of Fertility Analysis                         |  |  |
|  | Block 3                          | Fertility Transition in Some Developed and  |  |  |
|  | Dioek 4                          | Developing Countries  |  |  |
| Morbidity, Mortality   | Block 1                          | Basic Concepts and Measures of Morbidity  |  |  |
| and Public Health  | Block 2                          | Basic Concepts and Measures of Mortality  |  |  |
|  | Block 3                          | Life Table and Indirect Methods of Mortality<br>Estimation                                    |  |  |
| Research Methodology   | Block 1                          | Basic Concepts and Sampling Techniques  |  |  |
|  | Block 2                          | Research Methods  |  |  |
| Computer Applications<br>to Population Data                    | Block 1                          | Computer Application: Concepts and Packages   |  |  |
| Reproductive Health  | Block 1                          | Reproductive Health: Concepts, Theories and Issues  |  |  |
| Spatial Distribution, Migration                                | Block 1                          | Spatial Distribution: Measures and Patterns   |  |  |
| and Urbanization   | Block 2                          | Migration: Concepts, Measures, Determinants<br>and Consequences                               |  |  |
|  | Block 3                          | Urbanization: Concepts, Measures, Patterns and  |  |  |
|  |                                  | Consequences  |  |  |
| Dynamics of Age-Sex Structure                                  | Block 1                          | Dynamics of Age-Sex Structure   |  |  |
| and Population Projections                                     | Block 2                          | Population Estimates and Projections  |  |  |
| Population and Development                                     | Block 1<br>Block 2               | Population and Development: Linkages and Theories<br>Population and Development: Resources    |  |  |
|  | Dlasla 2                         | and Planning Perspectives   |  |  |
|  | Block 3                          | Social Development and Environment: Concepts<br>and Implications                              |  |  |
| Population Policy,   |                                  |   |  |  |
| Programme Management   | Block 2                          | Population Programme Management   |  |  |
| and Evaluation   | Block 3                          |   |  |  |
| Gender Issues  | Block 1                          |   |  |  |
| in Population Studies  |                                  | -   |  |  |
| Bio-statistics (Optional Paper)                                | Block 1                          | Bio-statistical Concepts and Methods  |  |  |
| Urban and Regional Planning<br>(Optional Paper)                | Block 1                          | Concepts, Theories & Issues   |  |  |

| Table 1 : The  | Topics cover | ed by the Self | -Instructional | Materials     |
|----------------|--------------|----------------|----------------|---------------|
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department evaluate the assignments and the grades obtained by the students in the assignments are used for computing final grades in each course. The students are also encouraged to communicate about their doubts/ confusion/ problems related to various courses to the faculty members of the department. Contact programmes are held for the students where the regular faculty members of the institute interact with the students on topics of various selfinstructional materials. Examination papers are also set by the regular faculty members of the institute in consultation with the department. Students are given extensive computer knowledge during the contact programme. They are trained to handle software packages that are frequently used in population and health related research.

It is worthwhile to mention here that the institute also has a regular one-year MPS course. The regular MPS course is a residential programme where students are required to stay on the campus of the Institute until the completion of the course. The syllabus of the MPS course through distance education is the same as that of the MPS regular programme. The various rules and regulations of both the courses are the same. The institute is running the MPS course through the dual mode ; through the face-to-face teaching mode, and through the distance education mode. Both the programmes are run simultaneously. Both the courses have their own respective demands and have different client bases. This is a unique example of a dual-mode education system of imparting higher education on an application-oriented discipline. The demand for the MPS course through distance education is increasing year on year.

#### 2.3 The Assessment System :

Assessment is achieved by conducting classroom examinations twice in a year at IIPS. The direct grading system of sevenpoint scale has been adopted for the purpose of evaluation. All the eligible students are informed well in advance about the schedule through mail as well as Institute's website.

Another unique feature of the course is

preparation of 'term paper'. Every student at the end of his/her course is required to develop a research paper on any topic related to population, health or family planning under the guidance of a regular faculty member of the institute. The students are also given opportunity to present and defend their term paper in a specially organized student faculty seminar at the institute. Later on, the students are advised to submit their complete research papers to the department for evaluation. The research papers submitted by the students are sent to two examiners for evaluation. The grades obtained by the students are added in their final grade sheets. Through this whole process, students learn how to write a research paper, how to present and defend the same among their peers. At the end of the course, students not only get the theoretical knowledge, but also get practical knowledge of the subject. Students are further encouraged to send their papers for publication in reputed journals.

Students who finish all the course requirements i.e., writing the theory paper examination as well as term paper presentation, are required to appear in an oral examination (viva-voce) conducted by a committee constituted by the Director of the Institute. The committee for the vivavoce examination consists of five members including four faculty members of the institute and one outside population expert. Every student has to pass the viva-voce examination to become eligible for getting the MPS degree through distance education.

#### 3. RESULTS :

#### 3.1 Profiles of the Distance Learners :

This section intends to examine the agesex distribution, educational background, working status and income distribution, source of information about the programme and intention of doing this course. The data for this study are obtained from students' records i.e. from the filled-in application forms. From the academic year 2002-2003 (ninth batch), the distant learners are asked to fill-up a small proforma dealing with their socio-economic and their demographic characteristics. Also they are asked to state their expectations from the course and the reason for opting the course. The information collected from these records can provide good opportunity to study the profile of students enrolled. By the academic year 2006-2007 (thirteenth batch), we have data for the students for the last five academic years, which again provides an opportunity to study the trends if at all it exists in the selected characteristics of the students. The present analysis is restricted to the records of 404 students from the ninth batch until the current i.e. thirteenth batch, i.e. for the last five years records. The data on rural-urban residence and source of information about the programme is available from the 10<sup>th</sup> batch onwards. So, the analysis of rural-urban residence and source of information is only restricted to students from the 10-13<sup>th</sup> batches only. In absolute terms, the number of male students has out numbered female students in both enrolment as well as getting degrees. However, the trend analysis shows some increase in the enrolment of female students and decline in the enrolment of males, over the past few years (Figure 1). However, the enrolment trend in the academic year 2006-2007 is an exception.

#### 3.2 The Socio-Demographic

#### Characteristics :

Males may find more time for their personal work or study than the females, as they are free from household activities. Once upon a time, women were expected only to perform the household activities including cooking and upbringing of children. However, with emancipation and social change in time, women increasingly have entered education and employment. The distance education programme is mostly opted by working people because of their affordability of course fees, and their immediate expectation from the course is promotional avenues.

Figure 2 shows that about two-thirds of the students are male, and a little more than half of the students are above 30 years of age. The data for the period 2002-2003 to 2006-2007 clearly show an increase in enrolment of students who are less than 30 years of age. In the academic year 2006-2007, the enrolment of students of age less than 30 years has actually bypassed the enrolment of students of age greater than or equal to 30 years (Figure 3). The data clearly show that the course is gaining importance among the younger population. About half of the distant learners are married.

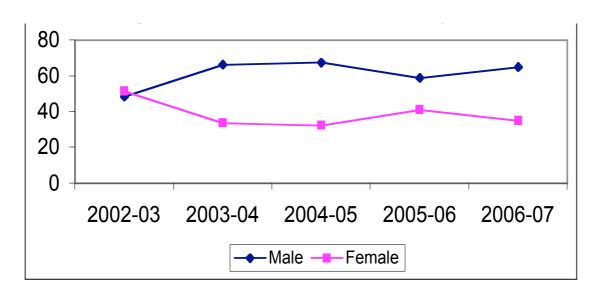


Figure 1 : Distribution of the enrolled students by gender

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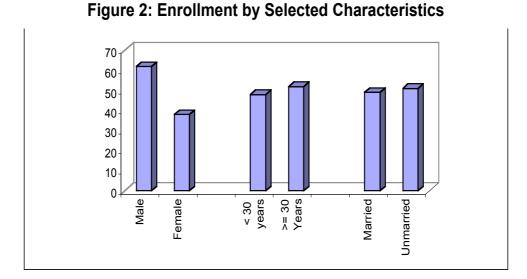


Figure 2 : Enrolment by selected characteristics

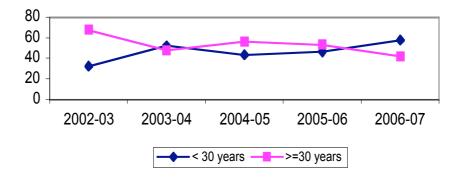


Figure 3 : Distribution of enrolled students by age

As far as the region is concerned, slightly less than one-third of the students (31%) are from north-central region (Chandigarh, Delhi, Haryana, Himachal Pradesh, Rajasthan; Chattisgarh, Madhya Pradesh, Uttaranchal and Uttar Pradesh) followed by West (Goa, Gujarat and Maharashtra) (30%) and East (Assam, Manipur and Nagaland) (23%) regions. Around two-third of the students are from the rural areas of the country (Figure 4).

The requirement for admission in the MPS course through distance education is a master's degree in any social science subjects or mathematics or statistics or health and medicine subjects. The course is also open to people from any other subjects who have working experience in the area of Population and health. Most of the students have had an MA degree (51%) followed by MSc degree (27%), and others (22%) before joining this course. More than threequarters of the students were from a social science background (78%) followed by other subjects including physical and sciences, engineering, biological management, and so on. (Figure 5). It is evident that students from the pure sciences, and from engineering, business, management are also opting for the course. Figure 6 shows the trend in enrolment by the subject studied at post-graduation level. The figure clearly depicts the rise in the enrolment of students having subjects other than social sciences at the postgraduate level

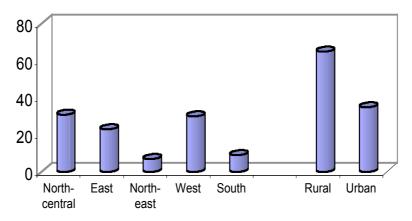


Figure 5: Enrollment by Residence Characteristics

Figure 4 : Enrolment by region of residence

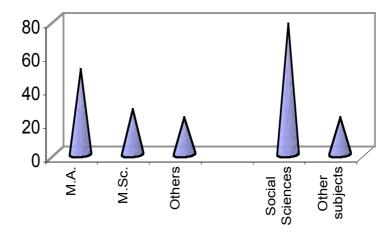


Figure 5 : Enrolment by educational background

It is generally observed that the distance education programme is mostly chosen by persons who are working in government organisations with the intention that after such training they may be promoted to higher positions and scale. It is evident from Figure 7 that a little less than half of the students were working in government organisations (48%). At the same time, 27% of the enrolled students were found not working at the time of enrolment. It again sheds light on the changing nature of enrolment in distance education. Distance education apart from catering to the need of the working people is also catering to the need of unemployed or those seeking employment. It seems clear that distance

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education in recent years is expanding its services to cater to the need of all people. Again it is found that people of all economic background are opting for distance education programme in population studies. More than one-third of the students reported a monthly income higher than Rs. 15000/- (Figure 8). Working persons intend always to update their working knowledge or acquire specific skills required for higher positions. Figure 9 gives the reason for enrolling in the MPS course. A majority (51%) of the students enrolled in the MPS course to acquire knowledge and skill in demography. Only a small proportion of students (15%) enrolled for promotional avenues, and again a small

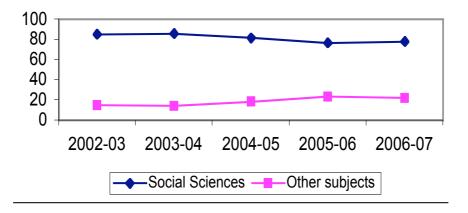


Figure 6 : Enrolment by postgraduate subject

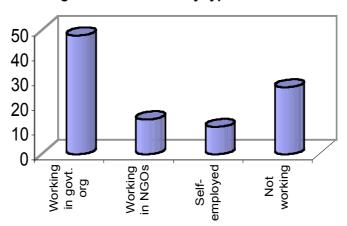


Figure 8: Enrollment by type of work

Figure 7 : Enrolment by type of employment

proportion enrolled for earning a higher degree. Slightly less than a quarter of the students enrolled for both acquiring knowledge and promotional avenues. Figure 10 gives the distribution of enrolled students by the source of information about the programme. A majority (60%) of the students directly contacted the department of Extra-Mural Studies & Distance Education at the institute for the information regarding the course. Again the institute's website (37%) and employment news (26%) are the most important sources in providing information to the students about the MPS course. More than a quarter (27%) of the students got information about the course from their friends or relatives. It

is clear from the data that people are not only joining the course for promotion but fresh graduates and postgraduates are also choosing the course to enhance their skills. Therefore, it can be said that distance education is not only catering to the need of older and working people but also to young and fresh graduates.

## 4. CONCLUSION :

It is evident from the above data and discussion that both the courses at IIPS - the MPS regular course and the MPS course through distance education - are together a good example of dual-mode teaching at the

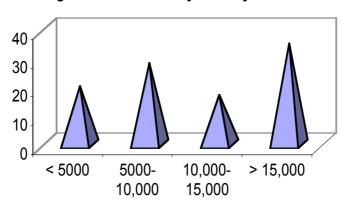


Figure 9: Enrollment by monthly income

Figure 8 : Enrolment by monthly income

Figure 10: Enrollment by intention

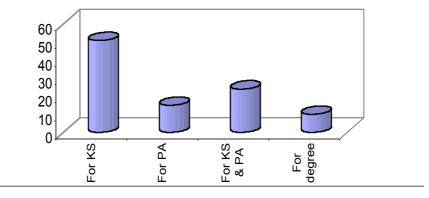


Figure 9 : Enrolment by intention Notes : KS – Knowledge & Skills, PA – Promotional avenues

institute. Students enrolled in both the courses get the same syllabus, are given the same level of computer knowledge, and are trained by the same faculty members of the institute. The library facility is also the same for the students enrolled in the two courses. Students of both the courses have to go through the same rigor of the course. The only difference between the two courses is the duration of face-to-face interaction between the teacher and the students. The regular students get the opportunity of face-to-face interaction yearround. On the other hand, the students enrolled in the MPS through distance education get this opportunity only during the contact programme. These distance students are encouraged to communicate to

either by email/post or by phone/fax. Therefore, it can be said that the programme is unique in the sense that it offers the MPS course through distance education without compromising the quality of education imparted to the students. The above analysis reveals that the MPS course through distance education is catering to the needs of all sections of society irrespective of socio-economic and demographic characteristics. It has reached to remote and rural areas. It is fast shifting its client base from only urban areas to both urban and rural areas. Mass media and development of new technologies have made this progress much easier. People are not only choosing

the department if they have any difficulties,

as well as to the concerned faculty member

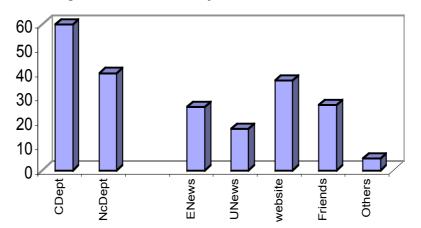


Figure 11: Enrollment by source of information

Figure 10 : Enrolment by source of information Notes : Cdept – Contacted the department, NcDept – Not contacted the department, ENews – Employment news, UNews – University news

distance education for promotional avenues but also for acquiring further knowledge and to develop their skills. It is clear that over the years, there is a paradigm shift in the client base of distance education. Also, distance education is reaching to all parts of the country and is not restricted to any particular region of the country.

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