

# Using Strategic Marketing Methods as a Basis for Graduate Program Portfolio Analysis

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# About DePaul University

- Founded in 1898 in Chicago, IL
- Largest Catholic and eighth largest private non-for-profit university in the nation.
  - Enrollment of over 25,000 students in Fall 2010.
  - From 1990 to 2010, DePaul's enrollment grew by 60%.
  - DePaul also enrolls more master's students than any other Illinois institution.
- 9 colleges and 6 campuses in Chicagoland area
- Diverse student body
  - 36% first-generation freshmen, and 25% students of color.
  - 25% of undergraduates are over the age of 24.

# Graduate Program Portfolio Analysis

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1. **Analysis of Existing Programs.** Identify investment opportunities to maximize growth within existing program portfolio.
2. **Opportunity Analysis.** Look at programs other Illinois institutions are offering that DePaul does not.

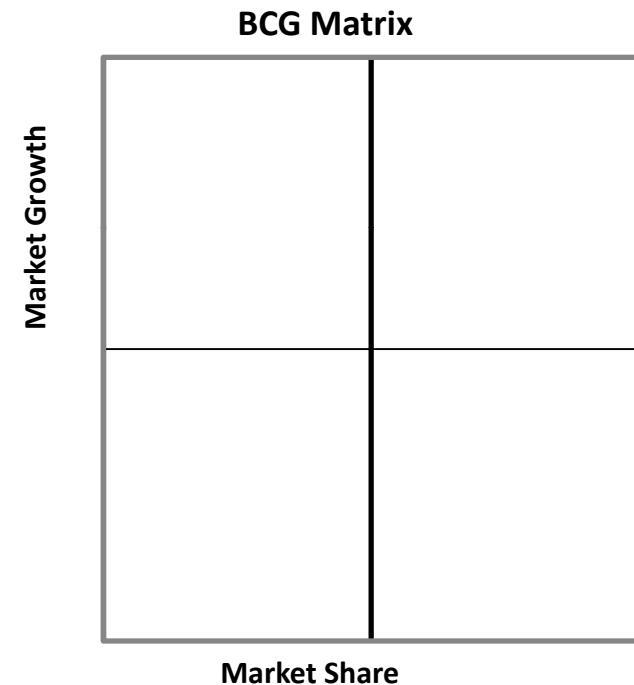


# **Step 1: Analysis of Existing Programs**

## The BCG matrix

In Philip Kotler's "Strategic Marketing for Educational Institutions," he suggests an academic portfolio strategy that can help determine which programs at an educational institution are the best in terms of quality and market viability.

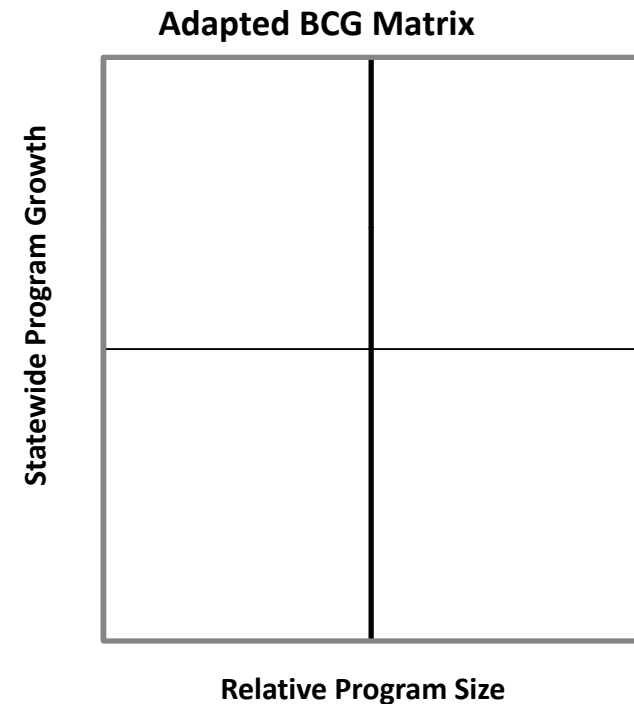
- The BCG matrix approach (Kotler, chapter 7) places two metrics into a matrix (usually company market share and market growth rate).



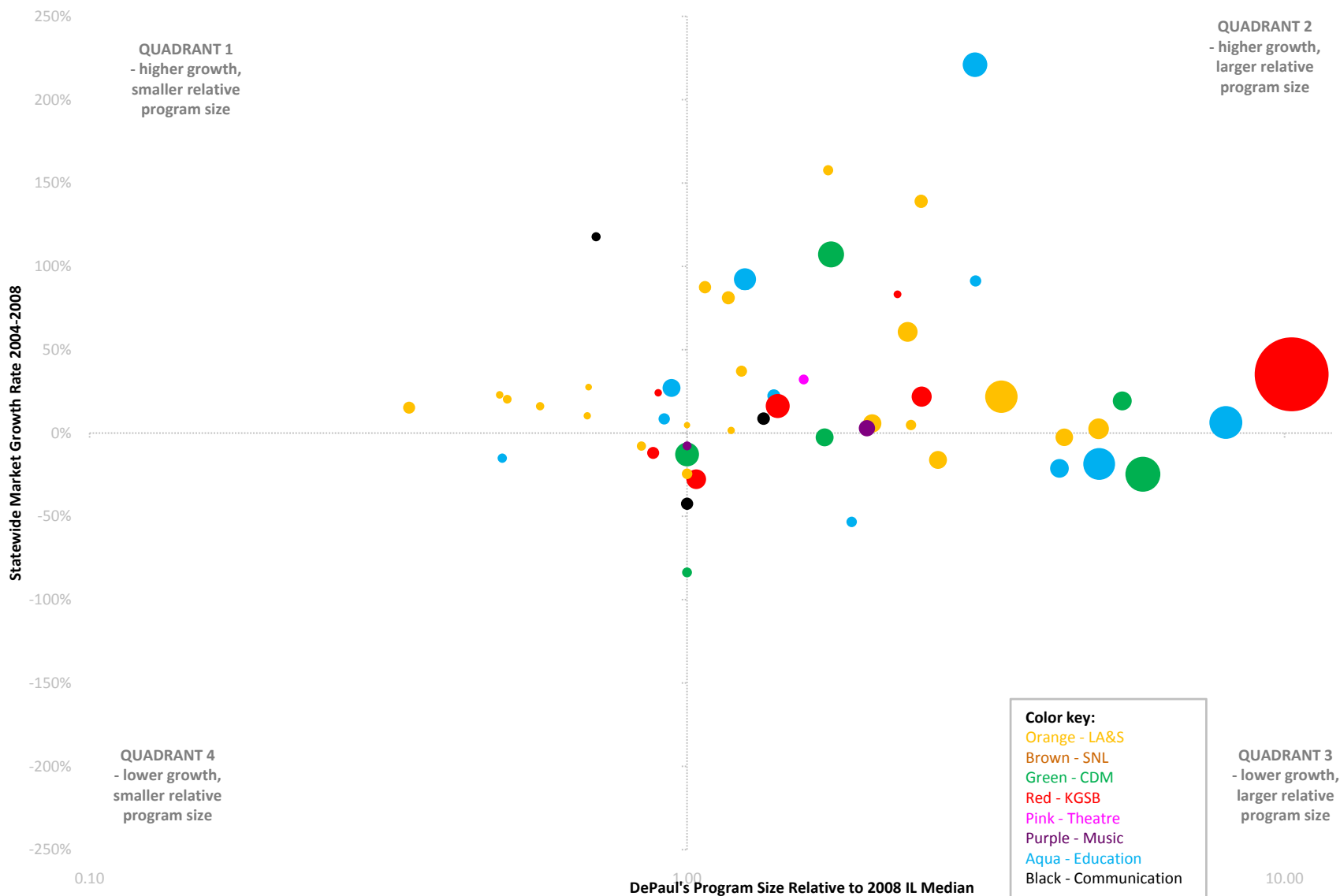
## Categorize existing programs based on the adapted BCG matrix

### Data used for the adapted BCG matrix.

- The adapted BCG matrix looks at external growth potential, based on DePaul's relative program size and statewide enrollment growth.
- Illinois Board of Higher Education (IBHE) master's enrollment data from a five-year period, 2004 to 2008, was used.

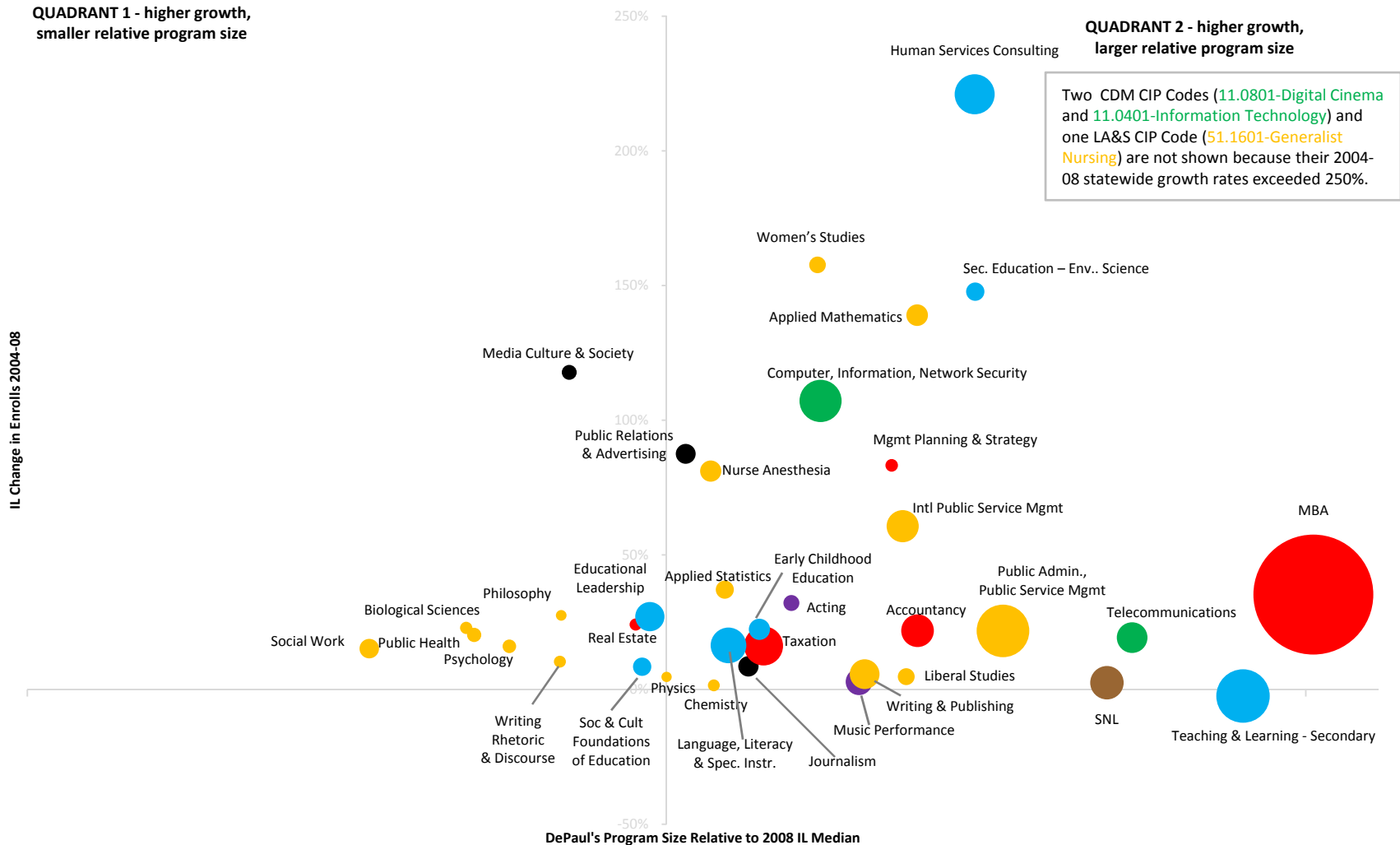


# Matrix of DePaul Master's Programs Compared to Illinois Median (x-axis) and by 2004-08 Growth (y-axis) (Programs of 10 or more enrollments in IBHE CIP Code categories; color-coded by DePaul college)





The upper quadrants of the matrix indicate growth programs – programs that did not show statewide growth from 2004 to 2008 were removed. This left 38 programs.



## An annotated sample of data presented in the tables.

“Quadrant” indicates the section of the matrix a DePaul program is in.

University enrollment data.

Job data is based on 3<sup>rd</sup> quarter 2010 economic data, obtained from EMSI’s website.

QUADRANT 2 – higher growth, larger relative program size	CIP Code and Description	DePaul College	DePaul Enrolls in 2008	DePaul Change in Enrolls 2004-08	DePaul change 2008-2010	DePaul Relative Program Size 2008	IL change 2004-2008	2010 Occupational Jobs in Chicago MSA	Expected Change in Available Jobs 2010-2015	Strategy
MBA (all)	52.0201 - Business Administration and Management, General	KGSB	1,634	3.2%	-11.1%	10.28	35.3%	149,990	11.7%	Grow

“CIP Code and Description” is the US department of Education’s Classification of Instructional Programs code that is assigned by the university for IBHE reporting.

IBHE data was used to determine DePaul’s relative program size and the 2004-08 statewide change.

“Strategy” is the outcome of the analysis using the GE/McKinsey matrix methodology.

## Categorize existing programs based on the GE/McKinsey matrix

- The standard GE Matrix looks at business opportunities based on their Market Attractiveness and the Business Unit Strength.
- Our adaptation of the GE matrix uses the dimensions of 1) low-cost and high revenue (Revenue Potential, x-axis) as a surrogate for Market Attractiveness, and 2) the capacity to grow a department (Staffing Growth Capacity, y-axis) as a surrogate for Business Unit Strength.

Staffing Growth Capacity	Revenue Potential		
	Low	Moderate	High
High	Explore	Grow	Grow
Moderate	Hold	Explore	Grow
Low	Hold	Hold	Explore

## GE/McKinsey Matrix Revenue/Capacity Analysis of DePaul Graduate Programs for Departments and Schools (Staffing Growth Capacity by Revenue Potential)

Staffing Growth Capacity	Low	Moderate	High
High	Department of History Department of Chemistry Department of Philosophy Department of Sociology	Department of Women's Studies	School of Education
Moderate	School of Music The Theatre School Department of Psychology	Department of Physics Department of Religious Studies	Department of International Studies Department of Economics Dept of Finance College of Communications Dept of Management Dept of Marketing
Low	School for New Learning School of Public Service	Department of Biology Department of Mathematics Department of English Department of Nursing	School of Accountancy & MIS Computers & Digital Media

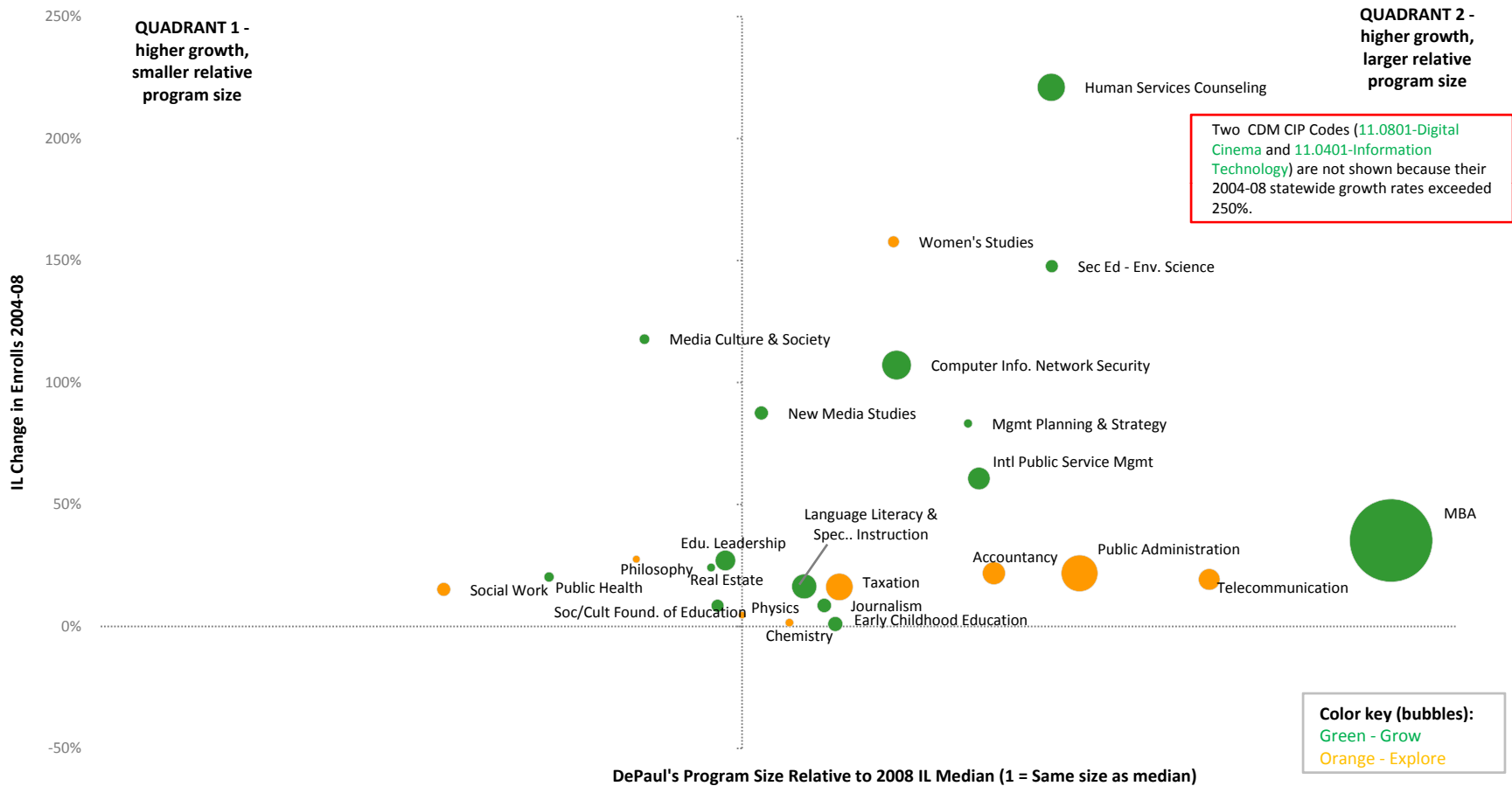
**Strategy:**

Hold
Explore
Grow

FTE Masters Graduate Students by Major (font size)	1- 14, 15-49, 50-149, 150-499, 500-1,000
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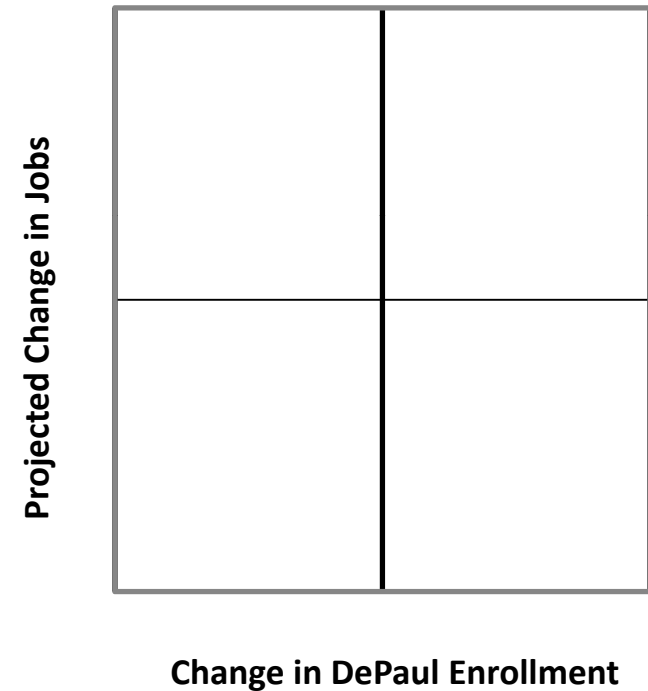
Data from OIPR Integrated Academic Information System, 2008-09

# Modified BCG Matrix of DePaul Master's Programs for *Grow and Explore Programs Only* (GE/McKinsey Analysis) – Programs with Illinois Growth in 2004-08

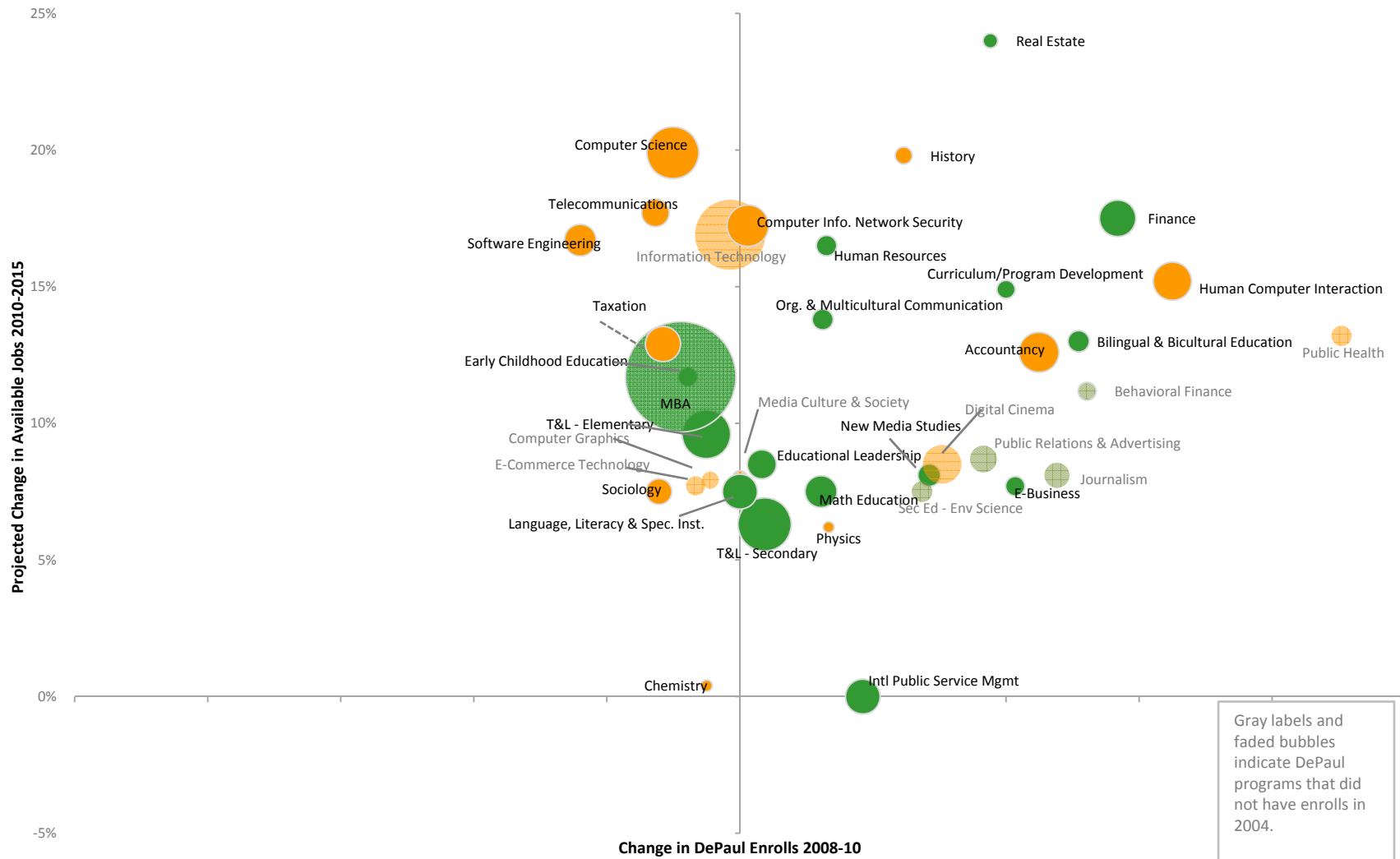


## Modified BCG matrix with employment and enrollment data.

- **External growth - jobs**
  - The second modified BCG matrix uses DePaul enrollment data and economic data from Economic Modeling Specialists, Inc. (EMSI).
    - EMSI's web-based tool brings in economic and educational data from several sources, using both CIP and SOC codes.



# Modified BCG Matrix of All DePaul Master's Program Growth by 2008-10 DePaul Enrollment Growth (x-axis) and 2010-15 Projected Change in Available Jobs Using EMSI Data (y-axis) (Color Coded by GE/McKinsey/Revenue/Capacity Analysis, size by 2010 Enrolls)



## Analysis of Existing Programs - Results

- The following 26 DePaul programs should be considered for investment.

SOE	KGSB	LA&S	CDM	CMN
1. Educational Leadership	1. <b>Real Estate</b>	1. <b>Social Work</b>	1. Business Information Technology	1. <b>Media, Culture and Society</b>
2. Social/Cultural Foundations of Education	2. MBA	2. <b>Public Health</b>	2. Computer, Information and Network Security	2. Journalism
3. Human Services Counseling	3. Taxation	3. <b>Philosophy</b>	3. Digital Cinema	
4. Language, Literacy and Specialized Instruction	4. Accountancy	4. <b>Physics</b>	4. Applied Telecom Systems	
5. Early Childhood Education	5. Management Planning and Strategy	5. Public Administration		
6. Secondary Education - Environmental Science		6. International Public Service Management		
		7. New Media Studies		
		8. Women's Studies		
		9. Chemistry		

Bold font indicates highest growth potential programs, based on current size (DePaul market share currently lower than average)





## **Step 2: Opportunity Analysis**

# New Program Opportunities

- Analysis looks at Illinois enrollment and enrollment growth in programs currently not offered by DePaul.
  - Includes programs both in disciplines offered by DePaul and not currently offered at DePaul. The first two digits of the CIP Code were used to make this determination.

## Opportunity Analysis of Illinois Programs with Positive 2004-08 Enrollment Growth - DePaul Offers Programs in Discipline but not in CIP Code (discipline = first two digits of CIP Code)

CIP and Program Description	2004	2005	2006	2007	2008	2004-08 % Chg	DPU Has Discipline	Largest Private	Largest Public	For-Profit
42.2601 - Forensic Psychology	181	215	246	294	720	297.8	Yes	Chicago School of Professional Psychology 55%		Illinois School of Professional Psychology 45%
13.0501 - Educational/Instructional Media Design	315	423	396	380	993	215.2	Yes		Northern Illinois 8%	AIU Online 60%
51.3302 - Traditional Chinese/Asian Medicine and Chinese Herbology	119	290	313	313	315	164.7	Yes	Pacific Coll. of Oriental Medicine 58%		Midwest Coll. of Oriental Medicine 36%
13.1319 - Technical Teacher Education	115	122	134	157	217	88.7	Yes		U of I Urbana 100%	
22.0202 - Programs for Foreign Lawyers	140	166	168	184	234	67.1	Yes	Northwestern 51%, IIT 44%		
51.2306 - Occupational Therapy/Therapist	222	220	255	300	338	52.3	Yes	Midwestern 32%	Governors State 23%	
51.0912 - Physician Assistant	276	301	344	361	386	39.9	Yes	Midwestern 42%	SIU Carbondale 13%	
51.0203 - Speech-Language Pathology/Pathologist	253	281	315	335	333	31.6	Yes	Northwestern 28%	Governors State 38%	
13.1007 - Education/Teaching of Individuals with Multiple Disabilities	211	245	277	297	273	29.4	Yes	St. Xavier 33%	Governors State 65%	
52.1003 - Organizational Behavior Studies	276	276	351	367	325	17.6	Yes	Lewis 41%		
51.0204 - Audiology/Audiologist and Speech-Language Pathology/Pathologist	179	182	175	192	204	14.0	Yes		Illinois State 48%	
42.0601 - Counseling Psychology	1,424	1,460	1,504	1,375	1,528	7.3	Yes	National Louis 15%	Governors State 10%	
51.0201 - Communication Disorders, General	207	219	233	223	214	3.4	Yes		Northern Illinois 30%	

**Opportunity Analysis of Illinois Programs with Positive 2004-08 Enrollment Growth  
- DePaul *Does Not* Offer Programs in Discipline or CIP Code (discipline = first two digits of CIP Code)**

CIP and Program Description	2004	2005	2006	2007	2008	2004-2008 % Chg	DPU Has Discipline	Largest Private	Largest Public	For-Profit
31.0505 - Kinesiology and Exercise Science	112	177	140	194	208	85.7	No	Benedictine 10%	SIU Carbondale 35%	
15.0612 - Industrial Technology Technician	158	167	180	201	279	76.6	No		Eastern Illinois 44%	
39.0601 - Pastoral Studies Counseling	279	312	350	365	373	33.7	No	Wheaton 24%		
15.1501 - Engineering Industrial Management	216	222	238	223	269	24.5	No	Northwestern 69%	U of I Urbana 18%	
14.1001 - Electrical, Electronics and Communications Engineering	1,009	1,043	1,155	1,265	1,196	18.5	No	IIT 35%	SIU Carbondale & U of I Urbana ,19% each	
04.0201 - Architecture (BArch, BA/BS, MArch, MA/MS, PhD)	488	524	563	533	562	15.2	No	IIT 34%	U of I Urbana 33%	
04.0301 - City/Urban, Community and Regional Planning	225	244	232	252	249	10.7	No		U of I Chicago 81%	
39.0601 - Theology/Theological Studies	653	866	853	808	672	2.9	No	Wheaton 24%		

# Conclusions and Actions

## Conclusions

1. Twenty-six current programs were identified as growth programs.
  - a) Eight of these programs were programs in which the university's current enrollment was less than the statewide median.
2. Thirteen programs offered by other institutions, in disciplines currently offered by the university, were identified as possible new programs.

## Actions

1. These results and recommendations were presented to the university provost and other senior leadership in October 2010.
2. This analysis, and a similar analysis of bachelor's programs completed in January 2011, have been incorporated into the planning process for program development.