## Communities ID Cards

This document gather the "ID Cards" of the CC communities found within your database.

The CC network was built by keeping a link between articles sharing at least 5 references. The communities characterized here correspond to the ones found in the level 1 (in the sense of the Louvain algo) which gathers more than 0 articles.

These ID cards displays the most frequent keywords, subject categories, journals of publication, institution, countries, authors, references and reference journals of the articles of each community. The significance of an item  $\sigma = \sqrt{N}(f-p)/\sqrt{p(1-p)}$  [where N is the number of articles within the community and f and f are the proportion of articles respectively within the community and within the database displaying that item ] is also given (for example  $\sigma > 5$  is really highly significant). The tf-idf value which can be calculated by tf - idf = f \* log(frac1p) is also given.

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Table 1: The community 1 - "CALL CENTERS" contains N=4 articles. Its average internal link weight is  $<\omega_{in}>\simeq 1/3$ 

Keyword	f(%)	tf-idf
CALL CENTERS	30.56	1.50
STAFFING	13.89	0.70
FINANCIAL SERVICES	12.50	0.70
CONTACT CENTERS	9.72	0.62
SKILL-BASED ROUTING	11.11	0.61
CALL CENTER MANAGEMENT	8.33	0.57
HEURISTICS	9.72	0.49
CONTACT RATES	5.56	0.48
APPLIED OPTIMIZATION	5.56	0.43
QUEUEING	6.94	0.37
MATHEMATICAL MODELING	5.56	0.37
BANKING	6.94	0.35
TIME-DEPENDENT OVERFLOW	4.17	
FINANCIAL SERVICE OPERATIONS	4.17	0.33
QUEUEING MODELS OF CALL	1.1.	0.00
CENTERS	4.17	0.33
CUSTOMER RELATIONSHIP	1.11	0.00
MANAGEMENT	4.17	0.32
FLEXIBLE SERVICE RESOURCES	4.17	0.32
DYNAMIC RESOURCE ALLOCATION	4.17	0.32
OVERLAPPING FLEXIBILITY	4.11	0.52
STRUCTURE	4.17	0.32
OPTIMIZATION	5.56	0.31
Subject	f(%)	
Operations Research & Management Science		σ 0.00
	100.00	
Engineering, Manufacturing	54.17	3.54
Management	45.83	-3.54
T	C(07)	
Journal PROD OPER MANAG	f(%)	σ
PROD OPER MANAG	54.17	3.54
M&SOM-MANUF SERV OP	44.44	7.94
J OPER MANAG	1.39	-8.71

Institution	f(%)	$\sigma$
COLUMBIA UNIV	9.72	34.96
SCH BUSINESS	9.72	24.59
GRAD SCH BUSINESS	6.94	22.97
NYU	5.56	27.11
UNIV N CAROLINA	5.56	16.67
NORTHWESTERN UNIV	5.56	
KOC UNIV	5.56	51.42
COLL ADM SCI & ECON	5.56	51.42
VRIJE UNIV AMSTERDAM	4.17	
IEOR DEPT	4.17	45.63
DEPT DECIS SCI	4.17	23.96
KELLOGG SCH MANAGEMENT	4.17	24.66
DEPT MATH	4.17	38.55
TEXAS A&M UNIV	2.78	12.72
CARNEGIE MELLON UNIV	2.78	14.39
SAN FRANCISCO STATE UNIV	2.78	30.40
STERN SCH BUSINESS	2.78	16.40
LEONARD N STERN SCH BUSINESS	2.78	22.62
HARVARD UNIV	2.78	13.21
KENAN FLAGLER BUSINESS SCH	2.78	9.53
Country	f(%)	$\sigma$
Country	1(/0)	0
Usa	48.61	31.56
Usa Turkey		31.56
Usa Turkey Canada	48.61	31.56
Usa Turkey	48.61 5.56	31.56 31.99
Usa Turkey Canada Netherlands Germany	48.61 5.56 5.56 5.56 2.78	31.56 31.99 11.39
Usa Turkey Canada Netherlands	48.61 5.56 5.56 5.56	31.56 31.99 11.39 18.51
Usa Turkey Canada Netherlands Germany	48.61 5.56 5.56 5.56 2.78 1.39 1.39	31.56 31.99 11.39 18.51 14.07 3.80 5.20
Usa Turkey Canada Netherlands Germany England	48.61 5.56 5.56 5.56 2.78 1.39 1.39	31.56 31.99 11.39 18.51 14.07 3.80 5.20
Usa Turkey Canada Netherlands Germany England Singapore	48.61 5.56 5.56 5.56 2.78 1.39 1.39 1.39	31.56 31.99 11.39 18.51 14.07 3.80 5.20
Usa Turkey Canada Netherlands Germany England Singapore Denmark	48.61 5.56 5.56 5.56 2.78 1.39 1.39	31.56 31.99 11.39 18.51 14.07 3.80 5.20 19.61
Usa Turkey Canada Netherlands Germany England Singapore Denmark France	48.61 5.56 5.56 5.56 2.78 1.39 1.39 1.39 1.39	31.56 31.99 11.39 18.51 14.07 3.80 5.20 19.61 4.66
Usa Turkey Canada Netherlands Germany England Singapore Denmark France Chile	48.61 5.56 5.56 5.56 2.78 1.39 1.39 1.39	31.56 31.99 11.39 18.51 14.07 3.80 5.20 19.61 4.66 19.61
Usa Turkey Canada Netherlands Germany England Singapore Denmark France Chile Author	48.61 5.56 5.56 5.56 2.78 1.39 1.39 1.39 1.39 f(%)	31.56 $31.99$ $11.39$ $18.51$ $14.07$ $3.80$ $5.20$ $19.61$ $4.66$ $19.61$
Usa Turkey Canada Netherlands Germany England Singapore Denmark France Chile Author Whitt W	48.61 5.56 5.56 5.56 2.78 1.39 1.39 1.39 1.39 1.39 1.39	$31.56$ $31.99$ $11.39$ $18.51$ $14.07$ $3.80$ $5.20$ $19.61$ $4.66$ $19.61$ $\sigma$ $13.74$
Usa Turkey Canada Netherlands Germany England Singapore Denmark France Chile Author Whitt W Nair SK	48.61 5.56 5.56 5.56 2.78 1.39 1.39 1.39 1.39 1.39 1.39 1.39	31.56 31.99 11.39 18.51 14.07 3.80 5.20 19.61 4.66 19.61 $\sigma$ 13.74 13.10
Usa Turkey Canada Netherlands Germany England Singapore Denmark France Chile Author Whitt W Nair SK Mehrotra V	48.61 5.56 5.56 5.56 2.78 1.39 1.39 1.39 1.39 1.39 1.39 1.39 1.39 8.33	31.56 31.99 11.39 18.51 14.07 3.80 5.20 19.61 4.66 19.61 $\sigma$ 13.74 13.10 11.52
Usa Turkey Canada Netherlands Germany England Singapore Denmark France Chile Author Whitt W Nair SK Mehrotra V Pinedo M	48.61 5.56 5.56 5.56 2.78 1.39 1.39 1.39 1.39 1.39 1.39 1.39 6.94	31.56 31.99 11.39 18.51 14.07 3.80 5.20 19.61 4.66 19.61 $\sigma$ 13.74 13.10 11.52 7.69
Usa Turkey Canada Netherlands Germany England Singapore Denmark France Chile Author Whitt W Nair SK Mehrotra V Pinedo M Stolletz R	48.61 5.56 5.56 5.56 2.78 1.39 1.39 1.39 1.39 f(%) 11.11 9.72 8.33 6.94 6.94	31.56 31.99 11.39 18.51 14.07 3.80 5.20 19.61 4.66 19.61 $\sigma$ 13.74 13.10 11.52 7.69 23.89
Usa Turkey Canada Netherlands Germany England Singapore Denmark France Chile Author Whitt W Nair SK Mehrotra V Pinedo M Stolletz R Seifert MJ	48.61 5.56 5.56 5.56 2.78 1.39 1.39 1.39 1.39 1.39 1.39 6.94 6.94 5.56	31.56 31.99 11.39 18.51 14.07 3.80 5.20 19.61 4.66 19.61
Usa Turkey Canada Netherlands Germany England Singapore Denmark France Chile Author Whitt W Nair SK Mehrotra V Pinedo M Stolletz R Seifert MJ Bollapragada S	48.61 5.56 5.56 5.56 2.78 1.39 1.39 1.39 1.39 1.39 1.39 6.94 6.94 5.56 5.56	31.56 31.99 11.39 18.51 14.07 3.80 5.20 19.61 4.66 19.61

Reference	f(%)	σ
Gans N, 2003, Manufacturing & Service Operations		
Management (5), 0	84.72	450.66
Aksin ZN, 2007, PROD OPER MANAG (16), 665	41.67	443.03
Brown L, 2005, J AM STAT ASSOC (100), 36	38.89	243.52
Wallace r B, 2005, Manufacturing & Service		
Operations Management (7), 0	30.56	259.66
Chevalier P, 2008, PROD OPER MANAG (17), 306	29.17	311.21
Garnett O, 2002, Manufacturing & Service		
Operations Management (4), 0	26.39	201.10
Avramidis AN, 2004, MANAGE SCI (50), 896	26.39	206.31
Halfin S, 1981, OPER RES (29), 567	26.39	194.03
Borst S, 2004, OPER RES (52), 17	26.39	227.89
Green LV, 2007, PROD OPER MANAG (16), 13	23.61	189.50
Mehrotra V, 2010, PROD OPER MANAG (19), 353	20.83	238.44
Whitt W, 2006, PROD OPER MANAG (15), 88	19.44	177.59
Jongbloed G, 2001, APPL STOCH MODEL BUS (17), 307	19.44	163.37
Whitt W, 1999, OPER RES LETT (24), 205	18.06	147.50
Whitt W, 2006, OPER RES (54), 37	18.06	137.32
Zohar E, 2002, MANAGE SCI (48), 566	18.06	128.03
Harrison j M, 2005, Manufacturing & Service		
Operations Management (7), 0	18.06	159.55
Chevalier P, 2003, INT J PROD ECON (85), 47	16.67	193.68
Armony M, 2004, OPER RES (52), 527	16.67	131.45
Gans N, 2007, M&SOM-MANUF SERV OP (9), 33	16.67	192.60
Gans N, 2003, OPER RES (51), 255	15.28	133.47
Franx GJ, 2006, PERFORM EVALUATION (63), 799	15.28	187.62
Pinedo ML, 2000, CREATING VALUE FINAN (0), 357	13.89	153.76
Shumsky RA, 2004, OR SPECTRUM (26), 307	13.89	146.77
Bhulai S, 2003, IEEE T AUTOMAT CONTR (48), 1434	13.89	165.66
RefJournal	f(%)	$\sigma$
Manufacturing & Service Operations Management	55.56	68.68
MANAGE SCI	52.78	34.76
OPER RES	50.00	46.36
PROD OPER MANAG	41.67	35.18
M&SOM-MANUF SERV OP	27.78	37.64
QUEUEING SYST	25.00	93.36
J AM STAT ASSOC	23.61	71.63
INTERFACES	20.83	31.40
ANN APPL PROBAB	18.06	85.10
J MARKETING	13.89	16.85

Table 2: The community 0 - "STAFFING" contains N=1 articles. Its average internal link weight is  $<\omega_{in}>\simeq 1/-9999$ 

Keyword	f(%)	tf-idf	Institution	f(%)	$\sigma$	
STAFFING	31.25	1.58	NYU	18.75	43.29	Reference
CALL CENTERS	31.25	1.53	GRAD SCH BUSINESS	18.75	29.41	Harrison j M, 2005, Manufacturing & Service
LOSS MODEL	12.50	1.01	COLUMBIA UNIV	18.75	31.87	
BRANCH AND BOUND	12.50	1.01	DEPT DECIS SCI	12.50	34.01	Operations Management (7), 0
BANKING	18.75	0.96	COLL ADM SCI & ECON	12.50	54.58	Gans N, 2003, Manufacturing & Service Op
REAL-TIME OPTIMIZATION	12.50	0.95	COLL BUSINESS	12.50	14.18	Management (5), 0
DOUBLY STOCHASTIC PROCESSES	12.50	0.95	SAN FRANCISCO STATE UNIV	12.50	64.60	Whitt W, 2006, PROD OPER MANAG (15
CALL CENTER OPERATIONS	12.50	0.95	SCH BUSINESS	12.50	14.94	Brown L, 2005, J AM STAT ASSOC (100),
STOCHASTIC CONVEXITY	12.50	0.93	KOC UNIV	12.50	54.58	Whitt W, 2006, OPER RES (54), 37
UNOBSERVABLE QUEUES	12.50	0.93	LEONARD N STERN SCH BUSINESS	12.50	48.13	Wallace r B, 2005, Manufacturing & Service
SAMPLE PATH CONVEXITY	12.50	0.93	STANFORD UNIV	12.50	24.01	Operations Management (7), 0
RENEGING	12.50	0.88	UNIV CONNECTICUT	6.25	24.04	Garnett O, 2002, Manufacturing & Service
INTEGER PROGRAMMING	12.50	0.87	DEPT MANAGEMENT SCI	6.25	10.56	Operations Management (4), 0
BALKING	12.50	0.86	SIMON GRAD SCH BUSINESS	6.25	41.69	Avramidis AN, 2004, MANAGE SCI (50), 8
CROSS-TRAINING	12.50	0.86	SACHS & CO	6.25	72.24	Whitt W, 1999, OPER RES LETT (24), 20
CALL CENTER MANAGEMENT	12.50	0.85	OPIM DEPT	6.25	41.69	Bassamboo A, 2006, OPER RES (54), 419
WORKFORCE SCHEDULING	12.50	0.85	IEOR DEPT	6.25	32.28	Borst S, 2004, OPER RES (52), 17
FLUID MODELS	12.50	0.84	UNIV PENN	6.25	11.96	Whitt W, 2005, MANAGE SCI (51), 221
TIME-VARYING DEMAND	12.50	0.82	DEPT IND ENGN & OPERAT RES	6.25	13.58	Whitt W, 2006, OPER RES (54), 247
QUEUES WITH TIME-VARYING	12.00	0.02	DEPT INFORMAT OPERAT &	0.20	10.00	Halfin S, 1981, OPER RES (29), 567
ARRIVAL RATE	12.50	0.82	MANAGEMENT SCI	6.25	36.10	Green LV, 2001, OPER RES (49), 549
						Armony M, 2004, OPER RES (52), 271
Subject	f(%)	σ	Country	f(%)	σ	Green LV, 2007, PROD OPER MANAG (16
Operations Research & Management Science	100.00	0.00	Usa	56.25	17.30	Jongbloed G, 2001, APPL STOCH MODEL
Engineering, Manufacturing	62.50	2.37	Turkey	12.50	34.01	Zeltyn S, 2005, QUEUEING SYST (51), 365
Management	37.50	-2.37	Belgium	6.25	21.74	Whitt W, 2002, STOCHASTIC PROCESS
						Zohar E, 2002, MANAGE SCI (48), 566
						Chevalier P, 2003, INT J PROD ECON (85
						Jennings OB, 1996, MANAGE SCI (42), 13
						Whitt W, 2004, OPER RES (52), 922
						Shumsky RA, 2004, OR SPECTRUM (26),
						RefJournal
						Manufacturing & Service Operations Manag
Journal	f(%)	$\sigma$	Author	f(%)	$\sigma$	OPER RES
PROD OPER MANAG	62.50	2.37	Whitt W	18.75	11.11	MANAGE SCI
M&SOM-MANUF SERV OP	37.50	2.92	Mehrotra V	18.75	12.52	PROD OPER MANAG
			Armony M	18.75	12.56	QUEUEING SYST
			Green LV	12.50	9.58	J AM STAT ASSOC
			Peter JKE	12.50	13.11	ANN APPL PROBAB
			Ozluk O	12.50	22.22	EUR J OPER RES
			Plambeck E	12.50	20.56	OPER RES LETT
			Seshadri S	12.50	7.01	
			Chevalier P	12.50	28.85	OR SPECTRUM
			Tezcan T	12.50	21.96	

Reference	f(%)	$\sigma$
Harrison j M, 2005, Manufacturing & Service		
Operations Management (7), 0	81.25	338.60
Gans N, 2003, Manufacturing & Service Operations		
Management $(5)$ , $0$	81.25	203.73
Whitt W, 2006, PROD OPER MANAG (15), 88	81.25	349.93
Brown L, 2005, J AM STAT ASSOC (100), 36	68.75	202.98
Whitt W, 2006, OPER RES (54), 37	50.00	179.33
Wallace r B, 2005, Manufacturing & Service		
Operations Management (7), 0	50.00	200.33
Garnett O, 2002, Manufacturing & Service		
Operations Management (4), 0	43.75	157.20
Avramidis AN, 2004, MANAGE SCI (50), 896	43.75	161.27
Whitt W, 1999, OPER RES LETT (24), 205	43.75	168.54
Bassamboo A, 2006, OPER RES (54), 419	43.75	211.91
Borst S, 2004, OPER RES (52), 17	37.50	152.68
Whitt W, 2005, MANAGE SCI (51), 221	37.50	181.23
Whitt W, 2006, OPER RES (54), 247	31.25	169.79
Halfin S, 1981, OPER RES (29), 567	31.25	108.33
Green LV, 2001, OPER RES (49), 549	31.25	149.55
Armony M, 2004, OPER RES (52), 271	31.25	148.75
Green LV, 2007, PROD OPER MANAG (16), 13	31.25	118.24
Jongbloed G, 2001, APPL STOCH MODEL BUS (17), 307	31.25	123.79
Zeltyn S, 2005, QUEUEING SYST (51), 361	31.25	153.40
Whitt W, 2002, STOCHASTIC PROCESS L (0), 0	31.25	174.97
Zohar E, 2002, MANAGE SCI (48), 566	25.00	83.58
Chevalier P, 2003, INT J PROD ECON (85), 47	25.00	136.97
Jennings OB, 1996, MANAGE SCI (42), 1383	25.00	121.61
Whitt W, 2004, OPER RES (52), 922	25.00	125.30
Shumsky RA, 2004, OR SPECTRUM (26), 307	25.00	124.56
RefJournal	f(%)	σ
Manufacturing & Service Operations Management	68.75	40.13
OPER RES	68.75	30.18
MANAGE SCI	62.50	19.50
PROD OPER MANAG	62.50	25.08
QUEUEING SYST	56.25	99.13
J AM STAT ASSOC	50.00	71.64
ANN APPL PROBAB	43.75	97.31
EUR J OPER RES	31.25	15.11
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31.2531.25

61.02

Table 3: The community 2 - "CALL CENTERS" contains N=1 articles. Its average internal link weight is  $<\omega_{in}>\simeq 1/-9999$ 

Expansion							
SKILL BASED ROUTING	Keyword	f(%)	tf-idf	Institution	f(%)	$\sigma$	
SILLE BASED ROUTING	CALL CENTERS	27.27	1.34	COLUMBIA UNIV	27.27	54.42	D f
TIME-VARYING ARRIVAL RATES   13.64   0.96   FINANCIAL SERVICES   13.64   0.76   CRAD SCH BUSINESS   13.64   0.76   CRAD SCH BUSINESS   0.90   12.05   CRAD SCH BUSINESS   0.90   12.05   CRAD SCH BUSINESS   0.90   12.05   CRAD SCH BUSINESS   0.90   23.21   CRAD SCH BUSINESS   0.90   0.50   CRAD SCH BUSINESS   0.90   CRAD SCH BUSINES	STAFFING	22.73	1.15	SCH BUSINESS	13.64	19.13	
FINANCIAL SERVICES   13.64   0.76	SKILL-BASED ROUTING	18.18	1.00	DEPT DECIS SCI	9.09	28.98	
TOSS MODEL	TIME-VARYING ARRIVAL RATES	13.64	0.96	NYU	9.09	24.57	
DEPT IND ENGN & OPERAT RES   9.09   0.74   SAN PRANCISCO STATE UNIV   9.09   5.05	FINANCIAL SERVICES	13.64	0.76	GRAD SCH BUSINESS	9.09	16.66	
QUEUEING MODELS OF CALL   SAN FRANCISCO STATE UNIV   9.09   55.08   CENTERS   9.09   0.73   COLL BUSINESS   9.09   10.07   COLL BUSINESS   9.09   14.03   CENTERS   10.00   COLL BUSINESS   10.00   COLL BUSINESS   9.09   14.03   Chevalier P, 2003, INT J PROD J PREFERENCE-BASED ROUTING   9.09   0.69   PFIZER PHARMACEUT INC   4.55   61.60   CUSTOMER CONTACT CENTERS   9.09   0.69   COLL CENTER MANAGEMENT   9.09   0.69   CALL CENTER MANAGEMENT   9.09   0.62   COUNTY   0.00   CO	LOSS MODEL	9.09	0.74	IEOR DEPT	9.09	55.08	
CENTERS   9.09   0.73   FINANCIAL SERVICE OPERATIONS   9.09   0.73   APPLIED OPTIMIZATION   9.09   0.73   APPLIED OPTIMIZATION   9.09   0.73   APPLIED OPTIMIZATION   9.09   0.69   PREFERENCE-BASED ROUTING   9.09   0.69   CUSTOMER CONTACT CENTERS   9.09   0.69   TURNOVER   9.09   0.63   TURNOVER   9.09   0.63   TURNOVER   9.09   0.65   TURNOVER   9.09   0.62   TURNOV	BRANCH AND BOUND	9.09	0.74	DEPT IND ENGN & OPERAT RES	9.09	23.21	
COLSTAINS   9.09   0.73   COLD BOSINESS   9.09   41.05   COL	QUEUEING MODELS OF CALL			SAN FRANCISCO STATE UNIV	9.09	55.08	
TIME-DEPENDENT OVERFLOW   9.09   0.71   APPLIED OPTIMIZATION   9.09   0.71   ASSIGNMENT PROBLEM   9.09   0.69   PFIZER PLARMACEUT INC   4.55   8.58   8.58   4.55   61.60   ASSIGNMENT PROBLEM   9.09   0.69   ACRESTONE CONSULTING   4.55   61.60   ACRESTONE CONSULTING CONSULTING   4.55   61.60   ACRESTONE CONSULTING CONSULTING CONSULTING CONSULTING   4.55   61.60   ACRESTONE CONSULTING CONSULTING CONSULTING C	CENTERS	9.09	0.73	COLL BUSINESS	9.09	12.05	
APPLIED OPTIMIZATION   9.09   0.7s     ASSIGNMENT PROBLEM   9.09   0.69     APRIFERENCE-BASED ROUTING   9.09   0.69     VALUE-BASED ROUTING   9.09   0.69     VALUE-BASED ROUTING   9.09   0.69     CUSTOMER CONTACT CENTERS   9.09   0.69     TURNOVER   9.09   0.69     TURNOVER   9.09   0.69     TURNOVER   9.09   0.69     TELEPHONE CALL CENTERS   9.09   0.69     TELEPHONE CALL CENTERS   9.09   0.62     CHURN   9.09   0.62     CALL CENTER MANAGEMENT   4.55   61.60     CALL CENTER MANAGEMENT   4.55   61.60     CALL CENTER MANAGEMENT   4.55   61.60     CALL CENTER MANAGEMENT   9.09   0.62     CALL CENTER MANAGEMENT   9.09   0.62     Subject   f(%) σ     Country   f(%) σ     Operations Research & Management Science   100.00   0.00     TEGH UNIV DENMARK   4.55   12.77     Management   22.73   4.24     Management   22.73   4.24     Management   f(%) σ     Country	FINANCIAL SERVICE OPERATIONS	9.09	0.73	LEONARD N STERN SCH BUSINESS	9.09	41.03	
ASSIGNMENT PROBLEM  9.09 0.69 PREFERENCE-BASED ROUTING  9.09 0.69 VALUE-BASED ROUTING  9.09 0.69 CUSTOMER CONTACT CENTERS  9.09 0.69 TELEPHONE CALL CENTERS  9.09 0.63 CROSS-TRAINING  CALL CENTER MANAGEMENT  9.09 0.62 Subject  Operations Research & Management Science  100.00 0.00 Engineering, Manufacturing  77.27 4.24 Management  77.27 4.24 MassOM-MANUF SERV OP  PROD OPER MANAG  77.27 4.24 M&SOM-MANUF SERV OP  ACHIEVAL ARCHSTONE CONSULTING  9.09 0.69 CALL CENTER MANAGE  FREER PHARMACEUT INC  4.55 61.60 CALL CENTERS  9.09 0.63 CEOLDMAN SACHS ASSET  MANAGEMENT  4.55 61.60 CALL CENTER MANAGEMENT  9.09 0.62 Subject  Operations Research & Management Science  100.00 0.00 CENTER MANAGEMENT  OPERATOR OF TARK O	TIME-DEPENDENT OVERFLOW	9.09	0.73	UNIV CONNECTICUT	4.55	20.49	, ,
PREFERENCE-BASED ROUTING	APPLIED OPTIMIZATION	9.09	0.71	DEPT MANAGEMENT SCI	4.55	8.98	
VALUE-BASED ROUTING	ASSIGNMENT PROBLEM	9.09	0.69	PFIZER PHARMACEUT INC	4.55	61.60	
CUSTOMER CONTACT CENTERS   9.09   0.69   TURNOVER   9.09   0.69   TELEPHONE CALL CENTERS   9.09   0.63   CHURN   9.09   0.63   CALL CENTERS   9.09   0.65   CALL CENTERS   9.09   0.65   CALL CENTER MANAGEMENT   9.09   0.62   CALL CENTER MANAGEMENT   9.09   CALL CENTER MANAGEMENT   9.09   0.62   CALL CENTER MANAGEMENT   9.09   CALL CENTER MANAGEMENT	PREFERENCE-BASED ROUTING	9.09	0.69	ARCHSTONE CONSULTING	4.55	61.60	
CONTACT CONTACT CENTERS	VALUE-BASED ROUTING	9.09	0.69		4.55	27.52	
TURNOVER	CUSTOMER CONTACT CENTERS	9.09	0.69	GOLDMAN SACHS ASSET			Gans N, 2007, M&SOM-MANUF SERV OF
CHURN		9.09	0.69	MANAGEMENT	4.55	61.60	
CROSS-TRAINING	TELEPHONE CALL CENTERS	9.09	0.63	DEPT STAT & OPERAT RES	4.55	21.74	
CROSS-TRAINING   9.09   0.62   CALL CENTER MANAGEMENT   9.09   0.62   Subject   16%   σ   TECH UNIV DENMARK   4.55   61.60   Country   TECH UNIV DENMARK	CHURN	9.09	0.63	GEORGIA INST TECHNOL	4.55	7.77	
Subject   f(%)   \sigma   \frac{\text{Frank GJ, 2006, PERFORM EVA}}{\text{Operations Research & Management Science}   100.00   0.00	CROSS-TRAINING	9.09	0.62	HSCH SPARKASSEN FINANZGRP	4.55	61.60	
Subject	CALL CENTER MANAGEMENT	9.09	0.62	TECH UNIV DENMARK	4.55	61.60	
Usa   Gas N , 2003, OPER RES (51), 2   Canada   4.55   14.46   Canada   4.55   5.12   Canada   4.55   12.77   Care of the principle of the p	Subject	f(%)	$\sigma$	Country	f(%)	$\sigma$	
Engineering, Manufacturing Management  77.27							
Management   22.73   -4.24     Canada   4.55   5.12   Netherlands   4.55   8.35   Denmark   4.55   35.55   Shumsky RA, 2004, OPER RES (52), Shumsky RA, 2004, OPER			I	Turkey		I	
Netherlands							
Denmark							
Germany   4.55   12.77   18.53   12.77   18.53   18.53   12.77   18.53   18				Denmark	4.55		
Belgium				Germany			
Journal   f(%)   \(\sigma\)   Author   f(%)   \(\sigma\)   Author   f(%)   \(\sigma\)   Ref Journal   Ref Journal				Belgium	4.55	18.53	
Journal							
Journal   f(%) σ   Author   f(%) σ   PROD OPER MANAG   77.27   4.24   Whitt W   27.27   19.09   M&SOM-MANUF SERV OP   22.73   1.36   Mehrotra V   13.64   10.60   Mehrotra A   9.09   24.58   Mehrotra A   9.09   20.75   Aksin ZN   9.09   23.22   Manitz M   9.09   23.22   Ann APPL PROBAB   J AM STAT ASSOC   ANN OPER RES							
Sournal   1(%) σ   Author   1(%) σ   PROD OPER MANAG   77.27   4.24   Whitt W   27.27   19.09   MANAGE SCI   Manufacturing & Service Operation   Manufacturing & Service Op							
PROD OPER MANAG	Journal	f(%)	$\sigma$	Author	f(%)	$\sigma$	
M&SOM-MANUF SERV OP       22.73       1.36       Mehrotra V       13.64       10.60       Manufacturing & Service Operation M							
Van Den schrieck JC  Mehrotra A  Aksin ZN  Barth W  Manitz M  Chevalier P  Sisselman ME  Van Den schrieck JC  9.09 24.58  M&SOM-MANUF SERV OP  QUEUEING SYST  INTERFACES  ANN APPL PROBAB  J AM STAT ASSOC  ANN OPER RES							
Mehrotra A 9.09 20.75 Aksin ZN 9.09 8.16 Barth W 9.09 23.22 Manitz M 9.09 23.22 Chevalier P 9.09 24.58 Sisselman ME 9.09 18.48	Mason mitter service	22.10	1.00			I	
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Barth W 9.09 23.22 Manitz M 9.09 23.22 Chevalier P 9.09 24.58 Sisselman ME 9.09 18.48							
Manitz M 9.09 23.22 J AM STAT ASSOC J ANN OPER RES Sisselman ME 9.09 18.48				1		I	
Chevalier P   9.09   24.58   ANN OPER RES   ANN OPER RES							
Sisselman ME 9.09 18.48 ANN OPER RES							
							ANN OPER RES
1.0000000000000000000000000000000000000						I	

Reference	f(%)	σ
Green LV, 2007, PROD OPER MANAG (16), 13	72.73	322.75
Gans N, 2003, Manufacturing & Service Operations		
Management (5), 0	72.73	213.83
Wallace r B, 2005, Manufacturing & Service		
Operations Management (7), 0	72.73	341.70
Halfin S, 1981, OPER RES (29), 567	40.91	166.30
Aksin ZN, 2007, PROD OPER MANAG (16), 665	40.91	240.44
Brown L, 2005, J AM STAT ASSOC (100), 36	40.91	141.61
Chevalier P, 2003, INT J PROD ECON (85), 47	36.36	233.63
Borst S, 2004, OPER RES (52), 17	31.82	151.90
Avramidis AN, 2004, MANAGE SCI (50), 896	31.82	137.52
Whitt W, 2006, OPER RES (54), 37	31.82	133.80
Whitt W, 2006, PROD OPER MANAG (15), 88	31.82	160.66
Gans N, 2007, M&SOM-MANUF SERV OP (9), 33	31.82	203.28
Garnett O, 2002, Manufacturing & Service		
Operations Management (4), 0	27.27	114.89
Harrison j M, 2005, Manufacturing & Service		
Operations Management (7), 0	27.27	133.24
Jongbloed G, 2001, APPL STOCH MODEL BUS (17), 307	27.27	126.68
Franx GJ, 2006, PERFORM EVALUATION (63), 799	27.27	185.16
Witt LA, 2004, J MANAGE (30), 149	27.27	180.66
Gans N, 2003, OPER RES (51), 255	27.27	131.74
Whitt W, 2006, OPER RES (54), 247	22.73	144.78
Jennings OB, 1996, MANAGE SCI (42), 1383	22.73	129.64
Whitt W, 2004, OPER RES (52), 922	22.73	133.56
Shumsky RA, 2004, OR SPECTRUM (26), 307	22.73	132.78
Armony M, 2004, OPER RES (52), 527	22.73	99.10
Green LV, 2001, OPER RES (49), 549	22.73	127.52
Whitt W, 2004, MANAGE SCI (50), 1449	22.73	133.41
RefJournal	f(%)	σ
PROD OPER MANAG	77.27	36.46
OPER RES	72.73	37.47
MANAGE SCI	68.18	25.00
Manufacturing & Service Operations Management	63.64	43.53
M&SOM-MANUF SERV OP	45.45	34.23
QUEUEING SYST	40.91	84.51
INTERFACES	36.36	30.49
ANN APPL PROBAB	36.36	94.83
J AM STAT ASSOC	36.36	61.06

31.82

50.38