2 MBA Team

Wedding Case Analysis

Operations Management
April 25, 2012

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Introduction & Agenda

1. Synopsis & Problem ID
2. Industry Analysis
3. Analytical Methods
4. Proposed Alternatives
5. Analysis & Findings
6. Suggested Action

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1. Synopsis & Problem Statement

Introductory Facts & Assumptions

Mary Jackson & Larry Adams

Engaged on March 31

Wedding slated for April 22

Cherry Blossoms needed in Photos

50 guests will be invited [assumption]

Takes place in Washington, D.C. [assumption]

21 days planning time until rehearsal dinner

1. Synopsis & Problem Statement

Bride's Wedding Demands

Ceremony on April 22

Custom Printed Invitations

Church Wedding

Catered reception [Hall]

Wear mother's wedding dress

Jane Summers as MoH [Peace Corps]

Hand-made bridesmaid dresses [Mrs. Watson]

1. Synopsis & Problem Statement

Identification of Problem

Mary and Larry want to have a wedding in 21 days, which is a very short planning period for such an event.

The case provides expected completion times for the tasks involved, as well as potential options to crash some of those times [additional costs]

1. Synopsis & Problem Statement

Scope of Problem & Statement

Team 2's Hybrid Role: Expediter | Wedding Planner

Problem Statement:

Develop the best strategy for successfully executing the Adams' wedding.

Subsidiary Issue: Trade-offs

- **Cost vs. Probability of Success**
- **Room for Unforeseen Issues**

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2.

Industry Analysis

Comparisons by Price & Size

Budget:	$1,200	$10,000	$35,000	$11,800	$10,000,000	$4,000
Guests:	50	250	100	50	450	250
Standard:	Mary's Sis	Survey	Survey	Small, Ave	State of Art	Survey
Reception:	$682	$5,683	$19,892	$6,706	$5,683,330	$2,273
Attire:	$172	$1,433	$5,017	$1,691	$1,433,330	$573
Ceremony:	$24	$200	$700	$236	$200,000	$80
Décor:	$100	$833	$2,917	$983	$833,340	$333
Music:	$84	$700	$2,450	$826	$700,000	$280
Photos:	$72	$600	$2,100	$708	$600,000	$240
Stationary:	$30	$250	$875	$295	$250,000	$100
Transport:	$6	$50	$175	$59	$50,000	$20
Gifts:	$30	$250	$875	$295	$250,000	$100
Per Guest:	**$24**	**$40**	**$350**	**$236**	**$22,222**	**$16**

2.

Industry Analysis

30 Day Wedding Planning Guide

	30 Day Planning Guide	Wedding Case: Pre-Crash
Day 1		Reserve Church & Hall
Day 3	Select and Secure Location, Mail Invites	Choose Dress Pattern & Material
Day 4		Finalize Guest List, Order Invites & Dress
Day 8	Select Officiant & Get Paperwork Filed	Select Invitation Style, Order Invites
Day 10	Choose Wedding Party & Dress Style	
Day 11	Purchase Bridal Gown (Off the rack)	Sew Dresses (15 days too late)
Day 13	Arrange Reception Dinner, Order Cake	Arrange Reception Dinner
Day 16		Address Invites
Day 18		Decorate Church, Choose Cake & Décor
Day 20	Purchase Flowers	Mail Invites (16 days too late)
Day 23	Purchase Favors & Décor	**Rehearsal Dinner**
Day 29	**Rehearsal Dinner**	

2.

Industry Analysis

Industry Standards

	The Knot Suggested Times	Wedding Case Time Schedule
Church & Hall	9-11 mos. in adv.	17 days notice [10C], 3 days to decorate
Catering	9-11 mos. in adv. 1-2 weeks for final headcount	11 days notice 2 days to choose cake
Dresses	Buy 6-8 mos. in adv. 3 Fittings at 6 wks, 4 wks, & 2 wks	3 days for pattern, 8 days for mat'l [5C] 11 days to sew [6C], 2 days for fitting 2 days to clean & press [1C]
Guest List & Invitations	Final guest list 9-11 mos. in adv. Order invitations 6-8 mos. in adv. Adress invites 4-5 mos. in adv. Send invites 3 mos. in adv.	4 days to get guest list together 3 days to choose invitations Order 12 days in advance **[5C]** 4 days to address **[2C]** 1 day to mail, Send 10 days in adv.

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Analytical Methods

Analytical Method: Gantt Charts

Original Timeline | No Addl Investment | $0.00

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	R	W
Reserve Hall & Church																	Décor			X	X
											Jane Arrives									X	X
Call Caterer				Give Notice to Caterer																X	X
Pattern								Receive Material						Sew Dresses							
Guest List					Pick				Order Invites									Address			
Shop																				X	X

Failed Paths:

- Dress & Invitations
- Possibly Church/Hall

3.

Analytical Methods

Analytical Method: Gantt Charts

Altered Timeline | Maximum Investment | $1540.00

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	R	W
Reserve Hall & Church / Décor	X	X
Jane Arrives	X	X
Call Caterer / Give Notice to Caterer	X	X
Pattern / Get Material / Sew Dresses / Fit/Press	X	X
Guest List / Pick / Order Invites / Label / Mail		
Shop	X	X

Failed Paths:

- Invitations

3.

Analytical Methods

Analytical Method: Gantt Charts

Altered Timeline | Minimum Investment | $910.00

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	R	W
Reserve Hall & Church																	Décor			X	X
										Jane Arrives										X	X
Call Caterer				Give Notice to Caterer																X	X
Pattern						Get Material				Sew Dresses					Fit/Press					X	X
Guest List					Pick			Order Invites				Label		Mail							
Shop																				X	X

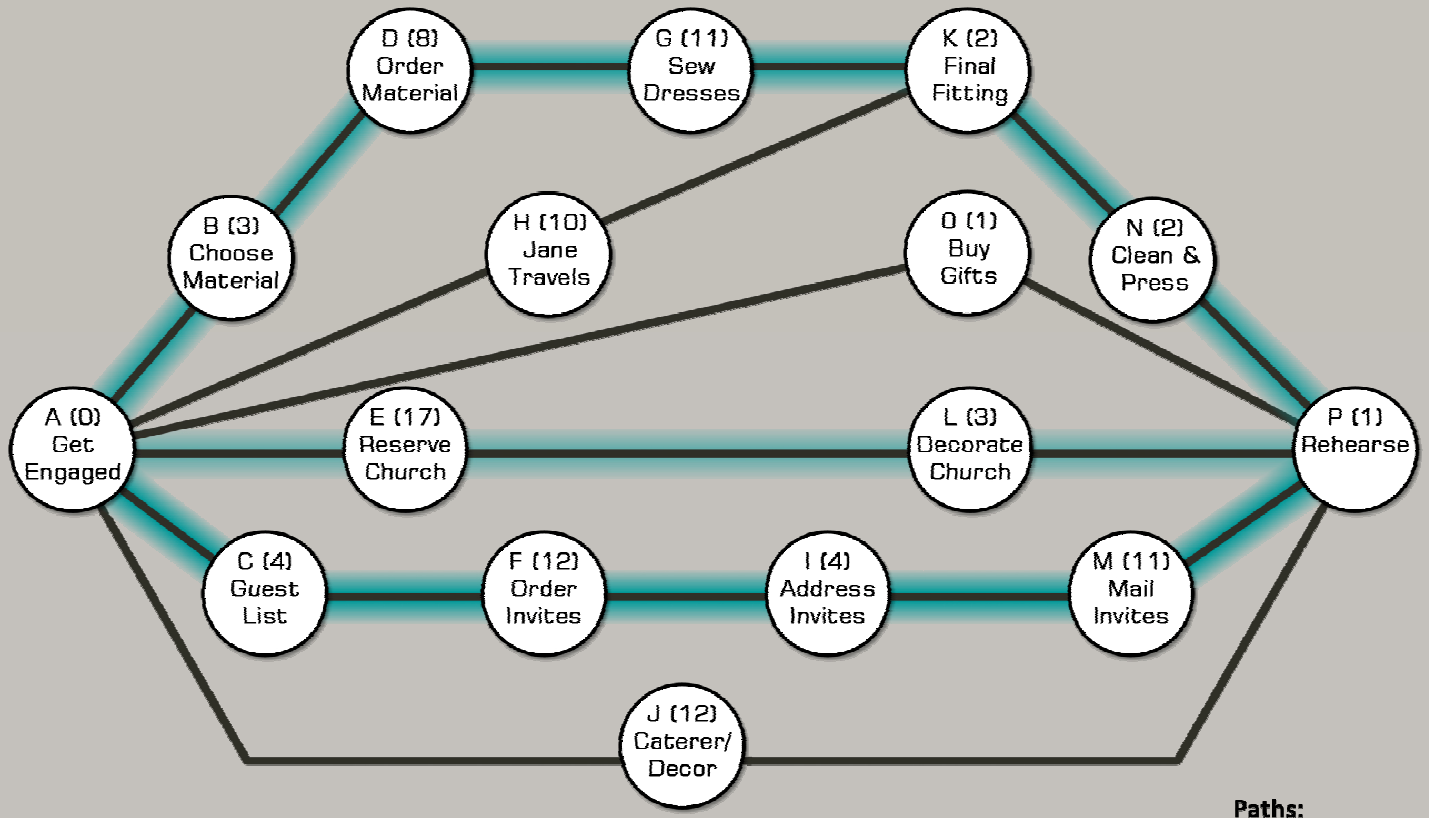
Failed Paths:

- Invitations [less overall slack]

3.

Analytical Methods

Analytical Method: Crash Analysis



Critical Path Key:
Days Until Rehearsal: 21
Critical Paths to Reduce: ACFIMP [Invitations] | Longest Path
ABDGKNP [Dresses] | 2nd Critical Path to Meet Deadline
Subsidiary Path to Reduce: AELP [Reception/Church]

Paths:
1. ABDGKNP: 26
2. AHKNP: 14
3. AELP: 21
4. ACFIMP: 31
5. AJP: 12

3.

Analytical Methods

Analytical Method: Crash Analysis

Task	Activity	Pred.	NT	CT	CC	CC/ Day	NT-CT
A	Get Engaged		0				0
B	Choose Mat'l		3				3
C	Guest List		4				4
D	Order Mat'l	B	8	5	$25	$8.33	3
E	Reservations		18	10	$100	$12.50	8
F	Order Invites	C	12	5	$35	$5.00	7
G	Sew Dresses	D	11	6	$120	$24.00	5
H	Jane Travels		10	2	$500	N/a	8
I	Address Invites	F	4	2	$25	$12.50	2
J	Caterer & Décor		12				12
K	Final Fitting	H, G	2				2
L	Decorate	E	3				3
M	Mail Invites	I	11	9	$200	$100.00	2
N	Clean & Press	K	2	1	$30	$30.00	1

Path ACFIM

Path ABDGKN

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Proposed Alternatives

3 Solution Strategies

- Minimum Investment
- Balanced Cost Savings & Risk
- Maximum Probability of Success

Analytical models built for each option

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Analysis & Findings

Option 1: Minimum Investment

Act:	Status:	a	m	b	ET	Var	CC
A		0	0	0	0.000	0.000	
B		2	3	4	3.000	0.111	
C		2	4	5	3.833	0.250	
D	**Crashed**	**4**	**5**	**8**	**5.333**	**0.444**	**$25.00**
E		10	17	19	16.167	2.250	
F	**Crashed**	**4**	**5**	**7**	**5.167**	**0.250**	**$35.00**
G		10	11	13	11.167	0.250	
H		2	10	13	9.167	3.361	
I	**Crashed**	**1**	**2**	**4**	**2.167**	**0.250**	**$50.00**
J		10	12	15	12.167	0.694	
K		1	2	4	2.167	0.250	
L		2	3	4	3.000	0.111	
M	**Crashed**	**8**	**9**	**11**	**9.167**	**0.250**	**$200.00**
N		1	1	2	1.167	0.028	
						Total CC	**$310.00**

Critical Path:	Probability
ABDGKNP [Dress]	1.1%
ACFIMP [Invites]	74.9%
AELP [Church]	78.2%

5.

Analysis & Findings

Option 2: Balanced Cost & Savings

Act:	Status:	a	m	b	ET	Var	CC
A		0	0	0	0.000	0.000	
B		2	3	4	3.000	0.111	
C		2	4	5	3.833	0.250	
D	**Crashed**	**4**	**5**	**8**	**5.333**	**0.444**	**$25.00**
E		10	17	19	16.167	2.250	
F	**Crashed**	**4**	**5**	**7**	**5.167**	**0.250**	**$35.00**
G	**Crashed**	**5**	**6**	**7**	**6.000**	**0.111**	**$600.00**
H		2	10	13	9.167	3.361	
I	**Crashed**	**1**	**2**	**4**	**2.167**	**0.250**	**$50.00**
J		10	12	15	12.167	0.694	
K		1	2	4	2.167	0.250	
L		2	3	4	3.000	0.111	
M	**Crashed**	**8**	**9**	**11**	**9.167**	**0.250**	**$200.00**
N		1	2	3	2.000	0.111	
						Total CC	**$910.00**

Critical Path:	Probability
ABDGKNP [Dress]	99.3%
ACFIMP [Invites]	74.9%
AELP [Church]	78.2%

5.

Analysis & Findings

Option 3: Max Safety Slack

Act:	Status:	a	m	b	ET	Var	CC
A		0	0	0	0.000	0.000	
B		2	3	4	3.000	0.111	
C		2	4	5	3.833	0.250	
D	**Crashed**	**4**	**5**	**8**	**5.333**	**0.444**	**$25.00**
E	**Crashed**	**7**	**10**	**17**	**10.667**	**2.778**	**$100.00**
F	**Crashed**	**4**	**5**	**7**	**5.167**	**0.250**	**$35.00**
G	**Crashed**	**5**	**6**	**7**	**6.000**	**0.111**	**$600.00**
H	**Crashed**	**2**	**2**	**10**	**3.333**	**1.778**	**$500.00**
I	**Crashed**	**1**	**2**	**4**	**2.167**	**0.250**	**$50.00**
J		10	12	15	12.167	0.694	
K		1	2	4	2.167	0.250	
L		2	3	4	3.000	0.111	
M	**Crashed**	**8**	**9**	**11**	**9.167**	**0.250**	**$200.00**
N	**Crashed**	**1**	**1**	**2**	**1.167**	**0.028**	**$30.00**
						Total CC	**$1,540.00**

Critical Path:	Probability
ABDGKNP [Dress]	99.9%
ACFIMP [Invites]	74.9%
AELP [Church]	99.4%

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6. Suggestion & Contingency

Suggestion for Mary

Recommendation Option 2: Balance Cost & Success

- Crash Invitation Path [ACFIMP] | 99.3%
- Crash Dress Path [ABDGKNP] | 74.9%

Additional Cost: $910.00

- Order Material: $25.00
- Order Invites: $35.00
- Mail Invites: $200.00
- Sew Dresses: $600.00
- Address Invites: $50.00

6. Suggestion & Contingency

Project Significance

Project Management Skills

Cost/Benefit Analysis

Decision-Making Skills

Supply Chain Management

Critical Thinking

6. Suggestion & Contingency

Thank you for your Attention!

Any Questions?