## To Follow-on or Not.....Your Decision Template

#### ACA Leadership Workshop Tuesday, November 14, 2017

John O. Huston (jh@OhioTechAngels.com; jh@BowTiedAngel.com) (614) 578-8483

## <u>45 – MINUTE AGENDA</u>

My 3 goals: Convince you that: 1) 100% of the F-O research is flawed

2) The F-O decision is tougher than our initial investment decision, and

3) You should use F-O decision tools

## F-O DECISION-MAKING

- Decision Analysis
- Game Theory: Multiple vs. Single Play
- Decision Trees
- Thomas Bayes' Theorem
- Predictive State Representation (PSR)
- Markov Decision Process (MDP) & Markov Chain
- Sequential Decision-making
- Optimization Problem Solved via Dynamic Programming & Reinforcement Learning
- Rob Wiltbank's 2007 & 2009 studies
- Isin Guler Aran's 2007 article entitled "Throwing Good Money After Bad"
- Go Beyond's 2016 Annual Report

## **RESEARCH ACTION MAP (4 cells)**



### Wrote 1 check

Multiple checks

## **RESEARCH ACTION MAP (20 cells)**

<u><1x</u>

<u>>1x</u>

#### 1 check because <u>no more rounds</u>:

- 1 & won (positive exit)
- 1 & dead (negative exit)
- Living, but no second round yet
- Living dead (zombie)

#### 1 check & multiple rounds, but:

- Not asked to participate or high minimum amount
- Invited but declined

#### Multiple checks:

- Living, but no exit yet
- Living dead (zombie)
- Invited & invested in every F-O round
- Invited into a few rounds & invested in each of them

## <u>GOAL #1: ALL F-O RESEARCH IS</u> <u>BADLY FLAWED</u>

"Your results may be worthless or misleading......but at least the data was easy to collect and you got published."

## KEYS FOR A WONDERFUL LIFE

- LUCK
- Health
- Grit (i.e. assiduity/pertinacity/longanimity)
- Smart Choices via <u>DECISION-MAKING DISCIPLINE</u>

"The race to the base of our brainstem always provides the Fastest & Loudest Answer (FLA)"

## **DECISION-MAKING DISCIPLINE**

- Beware of the <u>FLA</u>: Fastest & Loudest Answer our amygdala automatically provides
  - REACTION
  - System One Thinking (Daniel Kahneman)
  - The Elephant (Jonathan Haidt)
- Then, wake up your neocortex to provide:
  - THINKING
  - System Two Thinking
  - The Rider of the Elephant

(Kahneman's *Thinking, Fast and Slow*; Haidt's *The Happiness Hypothesis*)

## <u>REACTING = A "PBB" LIFE</u>

- No need for a decision template
- Electrifyingly chaotic
- Only need to practice one excuse for all failures
  - "I couldn't help myself".....or
  - "The devil made me do it"

(PBB = Pinball Ball)

## THINKING = "IOC" LIFE (3 STEPS)

1) Decide when to think (wake up System 2/Rider)

2) Decide how to tackle the problem/question

- 3) Be wary of
  - 189 Cognitive biases
  - *Ego*
  - Unknown questions

(IOC = Illusion of Control)

## WHEN THINKING, BE WARY OF

• 189 Cognitive biases



Unknown questions

## EASIEST EXCUSE: COGNITIVE BIASES

- Cognitive Bias Codex: Provides a graphic of <u>189</u>: <u>https://commons.wikimedia.org/wiki/File:The Cog</u> <u>nitive Bias Codex -</u> <u>180%2B biases, designed by John Manoogian I</u> <u>II (jm3).png</u>
- Wikipedia lists 185 Cognitive Biases of which <u>109</u> pertain to decision-making & belief biases + behavioral economics

## 29 vs. 17 COGNITIVE BIASES

- Wikipedia lists <u>109</u> Decision-making, belief, and behavioral biases (See thumb drive)
- <u>17</u> can affect 1<sup>st</sup> check decisions
- An additional **29** can affect F-O checks!
- That's **<u>1.7X</u>** more F-O cognitive biases......and
- We can repeat the initial ones to make all 46!

<u>My view:</u> There are more cognitive biases affecting our F-O decisions than our first check decisions.

## WHEN THINKING, BE WARY OF

• 189 Cognitive biases



• Unknown questions

## EGO OBSTACLES (I'm smart & right) MORE POWERFUL FOR F-O

- I'm willing to buy another chance to be proven right......buying hope
- Instead of collectively trying to improve our grasp of reality, I would rather have others agree that my view of reality is the right one
- I'll pay to get my idea for getting back on track implemented

## <u>My view:</u> Ego obstacles are stronger for F-O checks

## WHEN THINKING, BE WARY OF

• 189 Cognitive biases



Unknown questions

## **UNKNOWN QUESTIONS**

- I truly believe that more failures are caused by not asking the right questions than by wrong answers to questions asked
- CEOs readily admit to "Lessons Learned" since the last round....but
- They need to identify best sources of the best questions......and pursue those sources

<u>My view:</u> I relax my focus on unknown questions after the 1<sup>st</sup>/2<sup>nd</sup> round because I presume the team has it "figured out."

## SUMMARY OF GOAL #2:

The F-O decision is tougher than our initial investment decision due to:

- 1.7X more cognitive biases
- More ego obstacles
- Relaxed concern about unknown questions

## ADVANTAGES OF NOT F-0

- Don't waste time reading the company's reports or pleas for another check
- Don't care about Preemptive Rights
- Dilution is outside your control
- Never read another obtuse legal agreement (until the Purchase & Sale Agreement)
- Are the consummate "Free Rider"
- Avoid being a Director
- Won't get calls for help from the CEO
- Just await the request for your wire transfer instructions at the exit

## WHEN YOU DO F-O let's presume

## <u>you.....</u>

- Have unlimited time, energy, and dry powder to consider each request
- Have no concern about signaling (due to being a lead investor, Director, Observer) or peer pressure

<u>SO:</u> Let's discuss decision-making templates for F-O, which presumes you have set aside dry powder.....but do you have enough?

## HOW MUCH DRY POWDER?

# Portfolio Level Questions8Investee Level Questions614

(See Appendix)



#### Convince you that you should use F-O decision tools

## MINIMUM F-O DATA REQUESTS

- Explain approvals needed for this round
- Income statement (forecast variance, burn rate, sales success to become cash flow positive)
- Balance Sheet (cash/AR vs. Burn Rate = Months to Fumes)
- Cap Table: Current & pro forma
- Capital Access Plan (CAP):
  - Number of future rounds of dilutive capital and total dollars required to exit
  - Is this round large enough to hit milestones for an exit or an up round?

## DUE DILIGENCE QUESTIONS (DDQs) vs. LUCRATIVE INVESTMENT QUESTIONS (LIQs)

<u>**DDQs</u>** assess whether this baby will survive & thrive......BUT.....</u>

"Building a great company is necessary but insufficient for building a great investment"

<u>LIQs</u> assess whether this child will pay me back for all my nurturing & financial support

## LUCRATIVE INVESTMENT QUESTIONS (LIQs)

- 1) Will Angel Directors or VCs drive the exit?
- 2) How much must I invest to offset my ownership dilution caused by this round?
- 3) What are the new exit price tags required to yield a 1X, 5X and 10X considering preference stack and option pool refresh (value dilution)
- 4) Would current books & records & IP pass scrutiny by large new investors or a bidder?
- 5) Update the Targeted Strategic Bidders

## LUCRATIVE INVESTMENT QUESTIONS (LIQs)

- 6) What is the BOD's latest MAD (Minimum Acceptable Deal)? Delusional?
- 7) Update the range of possible terminal values based on the Capital Access Plan, updated forecasts, and current market comparables

## I ALWAYS F-O WHEN

- I'm a Director or Observer
- The round is grossly oversubscribed & includes NSM (New, Smart, Meaningful) investors
- I really, really think the Founder/CEO/team STILL deserve to become rich from this idea

## F-O CONSIDERATIONS (Financial)

- The round appeared in the Capital Access Plan
- Performance >75% of forecasts
- This round will enable positive cash flow
- To avoid ownership dilution
- To avoid economic dilution

## F-O CONSIDERATIONS (Soft issues)

#### Signaling Issues due to being:

- A Director or Observer
- Lead angel group or investor
- Cap table whale or industry expert

#### **Relationship & Reputation Issues:**

- Spurning request from an angel Director buddy
- Syndicated deal from your major deal source
- Free Rider concerns (100% inside round)

## 14 F-O SHOWSTOPPERS

- 1) Any trust or honesty concerns
- 2) Lost confidence in the CEO or team (still deserve to make millions?)
- 3) Outside directors not investing
- 4) Convertible note round not in Capital Access Plan
- 5) Insufficient reporting since my last check
- 6) Much of the new money goes out the back door (back taxes, payables, accrued salaries)
- 7) The fix for flagging sales is to Pivot (with new risks)

## 14 F-O SHOWSTOPPERS

- 8) Very large round so my \$\$\$ are inconsequential 9) VCs are surprisingly now *essential* for an exit 10) No optionality after this round to invest further 11) I am being removed as a Director/Observer 12) TC&V are grossly over market and a future round must be raised for an exit (high down round risk) 13) BOD has gone native (Minimum Acceptable Deal is delusional)
- 14) CEO won't articulate "Lessons Learned"

## FAILURE SCORECARD

Review "The Top 20 Reasons Startups Fail" and fill out the scorecard

In September CB Insights gathered post-mortems and distilled them down into a graph of the Top 20 Reasons Startups Fail. I have adapted this into a simple scorecard to record whether you think the risk of the failure factor has increased, stayed flat, or decreased since your last check.

## YOUR "I Believe....." Statement

After I've written another check to this venture my returns will improve if the company:

- Successfully launches version 2.0.....and
- Achieves positive cash flow.....and
- Raises the requisite capital to exit......with
- Benign TC&V.....so eventually
- Multiple M & A bidders will arrive.....and
- The BOD will accept a lucrative bid
  *"I believe this is quite possible"*

## 2<sup>nd</sup> CHECK BLUNDERS

- 1) My ego ruled (I would rather be right than accurately grasp reality)
- 2) Blindsided by questions the BOD did not know enough to ask
- I relied on *DDQs* (Due Diligence Questions) versus *LIQs* (Lucrative Investment Questions)
- 4) I succumbed to Cognitive Biases
- 5) For medical devices I fell for the Desirability Effect

## GOAL #3 SUMMARY:

**Convince you that you should use F-O decision tools:** 

- Minimum F-O data request
- Ask 7 LIQs and not just more DDQs
- Determine your automatic F-O
- F-O Financial Considerations
- F-O Soft Issues Signaling/Relationship/Reputation
- Develop your Showstoppers
- Try the Top 20 Failure Factors Scorecard
- Use your "I believe....." statement

## <u>SO.....</u>

#### "Never throw good money after money you won't admít you've already lost."

## MY PROMISE TO YOU.....

"If you use these tools you will excel at rationalizing all your purely emotional decisions"

## <u>APPENDIX</u>

- IP Considerations
- Trademark Considerations
- Dry Powder Considerations
  - 8 portfolio level issues
  - 6 investee level issues

## F-O IP Issues

Are IP issues being managed in accordance with company growth/changes?

- Provisional Patents: What's the plan for converting to non-provisional?
- Has filing in foreign countries become important?
- IP Improvements: Being tracked & captured?
- Are competitors patents being tracked?
- Are all assignment documents of departing employees being checked?
- Do employment/contractor agreements need updating?

## F-O Trademark Issues

- Are all uses conforming and properly tagged?
- Do descriptions of goods/services need updating?
- Have likely foreign markets been cleared?
- Are new products protected?

## 8 Portfolio Level Dry Powder Issues

- 1) How much time/effort/\$\$\$ for angel investing?
- 2) How will I construct my portfolio (# of companies, their industry and stage)?
- 3) Minimum & maximum per company?
- 4) How many companies will expire after Round #1?
- 5) Should I presume I will always be able to F-O?
- 6) Will I participate in Band-Aid bridge note rounds?
- 7) What will be my likely harvests (when + \$\$\$)?
- 8) How will I use my harvest \$\$?

## 6 Dry Powder Issues for Investees

- 1) Would I accept a Director seat (which requires more dry powder)?
- 2) How much additional capital needed to exit?
- 3) How many rounds? (Each is an opportunity for changing prior Terms, Conditions & Valuation)
- 4) Will I ever buy bridge notes from this company?
- 5) Will I have the opportunity to invest in all future rounds (i.e. the essentiality of VCs)?
- 6) What's my source of cash? (Harvest? IRC 1045?)

## **3 Questions**

Then I will ask the audience to explain how their angel group tackles F-O investment requests