



ECE 188

Project Planning and Product Development

New Venture Formation – Traditional Approach

1. Come up with a concept / product idea
2. Put together detailed business plan and product development plan
3. Raise sizeable investment to support product development and R&D
4. Assemble engineering team, design and build product(s)
5. Sell product(s) and make tons of \$\$\$

What could possibly go wrong?

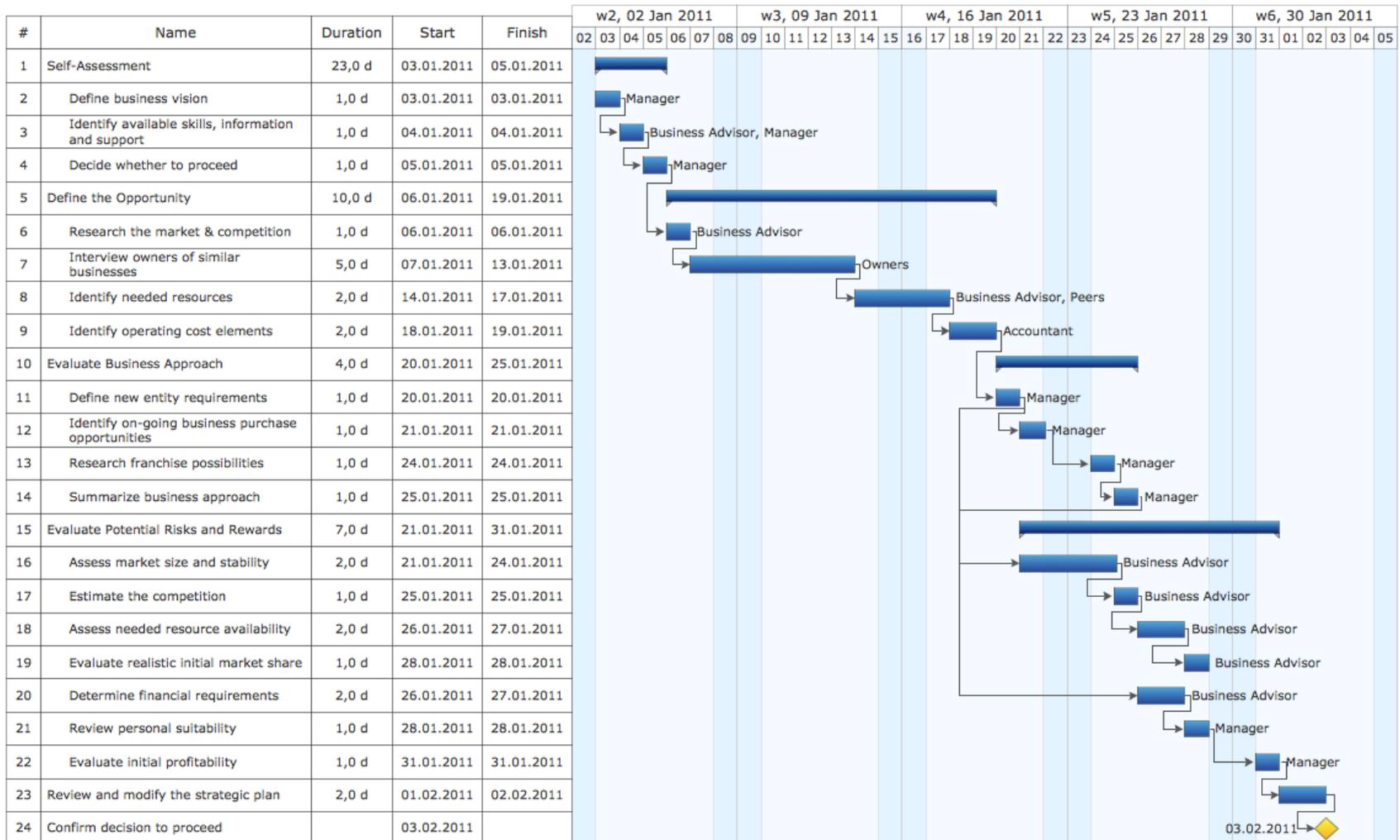
Product Development – Traditional Approach

1. Conduct extensive research on your idea / product
2. Come up with a concept / product idea
3. Put together detailed product development plan
 - a. Detailed product / design specs
 - b. Detailed project plan – Gantt Chart
4. Allocate resources, design and build product according to dev plan

What could possibly go wrong?

Example Gantt Chart

Strategic Plan for New Business



New Venture Formation – Lean Launch

“A startup is a temporary organization designed to search for a repeatable and scalable business model.” – Steve Blank

1. Come up with a concept / product idea. TREAT AS A HYPOTHESIS!
2. Obtain immediate market validation / feedback
 - a. Survey / interview partners, customers, etc.
 - b. MVP: Minimum Viable Product
 - c. Pivot when necessary
 - d. Iterate and repeat
3. Raise small seed fund for initial work, then more \$\$\$ after validation
 - a. Friends & Family
 - b. Crowd funding
 - c. Angel investors

Alex Osterwalder's Business Model Canvas

<p>Key Partners </p> <ul style="list-style-type: none"> • Who are our key partners? • Who are our key suppliers? • Which key resources are we acquiring from partners? • Which key activities do partners perform? 	<p>Key Activities </p> <ul style="list-style-type: none"> • What key activities do our value proposition require? • Our distribution channels? • Customer relationships? • Revenue streams? 	<p>Value Propositions </p> <ul style="list-style-type: none"> • What value do we deliver to the customers? • Which one of our customer's problems are we helping to solve? • What bundles of products and services are we offering to each customer segment? • Which customer needs are we satisfying? 	<p>Customer Relationships </p> <ul style="list-style-type: none"> • What type of relationship does each of our customer segment expect us to establish and maintain with them? • Which ones have we established? 	<p>Customer Segments </p> <ul style="list-style-type: none"> • For whom are we creating values? • Who are our most important customers?
<p>Key Resources </p> <ul style="list-style-type: none"> • What key resources do our value proposition require? • Our distribution channels? • Customer relationships? • Revenue streams? 		<p>Channels </p> <ul style="list-style-type: none"> • Through which channels do our customer segments want to be reached? • How are we reaching them now? • How are our channels integrated? 		
<p>Cost Structure </p> <ul style="list-style-type: none"> • What are the most important costs inherent in our business model? • Which key resources are most expensive? • Which key activities are most expensive? 			<p>Revenue Streams </p> <ul style="list-style-type: none"> • For what value are our customers really willing to pay? • For what do they currently pay? • How are they currently pay? • How would they prefer to pay? • How much does each revenue stream contribute to overall revenues? 	

Agile Product Development (adapted)

1. Conduct preliminary research on your idea / product, sketch out initial concepts.
2. Identify key questions, risks, and unknowns.
3. Identify prototype ideas that can give insight on questions / risks / unknowns. Begin prototyping, iterating, and testing.
 - a. Start simple – optimize for speed of feedback over quantity
 - b. “Sprints”
 - c. “Scrums”
4. Refine and repeat.
5. Goal is to break the problem into small “chunks” that can be readily addressed and obtain quick learning/feedback.
6. Feedback is key!