

Applying the Business Model Canvas to Bio-renewable Firms

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University Park, PA



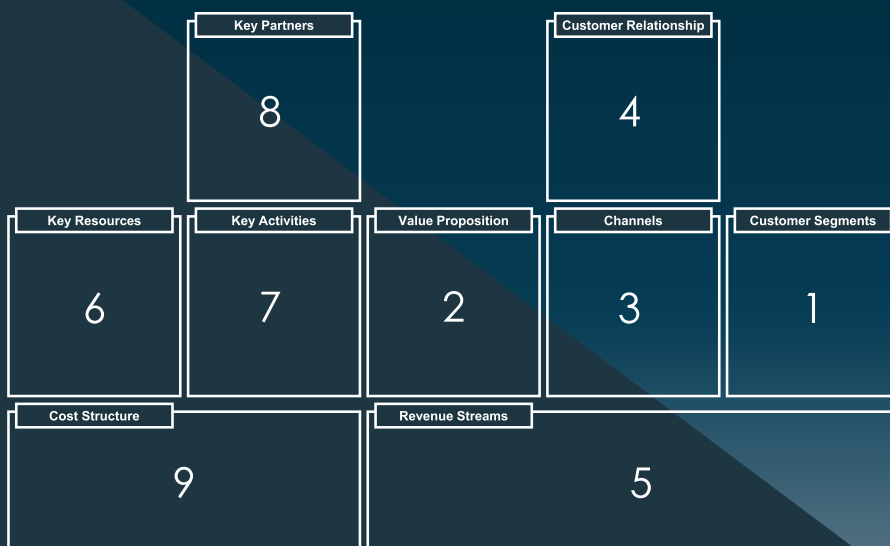
1

Session Goal

- Increase your understanding of business model canvas (BMC)
- Provide bio-renewable example for the BMC
- Identify BMC resources

2

Business Model Canvas



3

1. Customer Segments

- Unique group that demonstrates need for your products and services
 - > Can be individuals, business, institutional, etc.
- Defined by many parameters
 - > Geography Demographics Income
 - *Some may not be obvious
- Quantify usage by segment
 - > Typical customer, usage & price point, over time
- Provides revenue estimates
- Multiple segments are likely
 - > Some will cost more to service

4

1-A: segmentation factors

- Consumer
 - > Demographics
 - Age, ethnicity, SES, geography, education, etc.
 - > Psychographics
 - Personality traits, beliefs, world views, values, etc.
 - > Usage patterns
 - Frequency, behavioral precursors/ties,
 - > Lifestyle Factors
 - Interests, hobbies, occupations, family structure, affiliations
- Business
 - > Industry type
 - > Locations
 - > Organization sizes
 - > Pressing Issues
 - > Stages & Agents in the sell process (sales cycle)

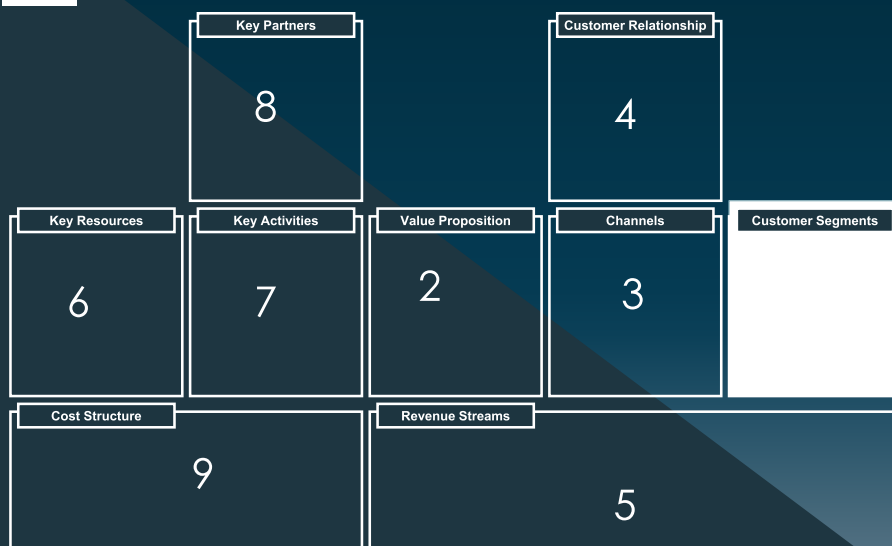
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United Bio-Fuels Group, LLC



6

BFG LLC Business Model Canvas



7



1. BFG Customer Segments

- I. Professional Lumber Dealer
 - I. Lezzer Lumber, YBC, etc. (1-3 locations)
 - II. Independently operated –pro/local focus
 - III. Less formal purchasing
 - IV. Lower volumes
- II. Big Box Retail
 - I. Home Depot or Lowes ~2000 stores
 - II. Rigorous purchasing protocols, structured, etc.
 - III. Large footprint – merchandising needs, etc.

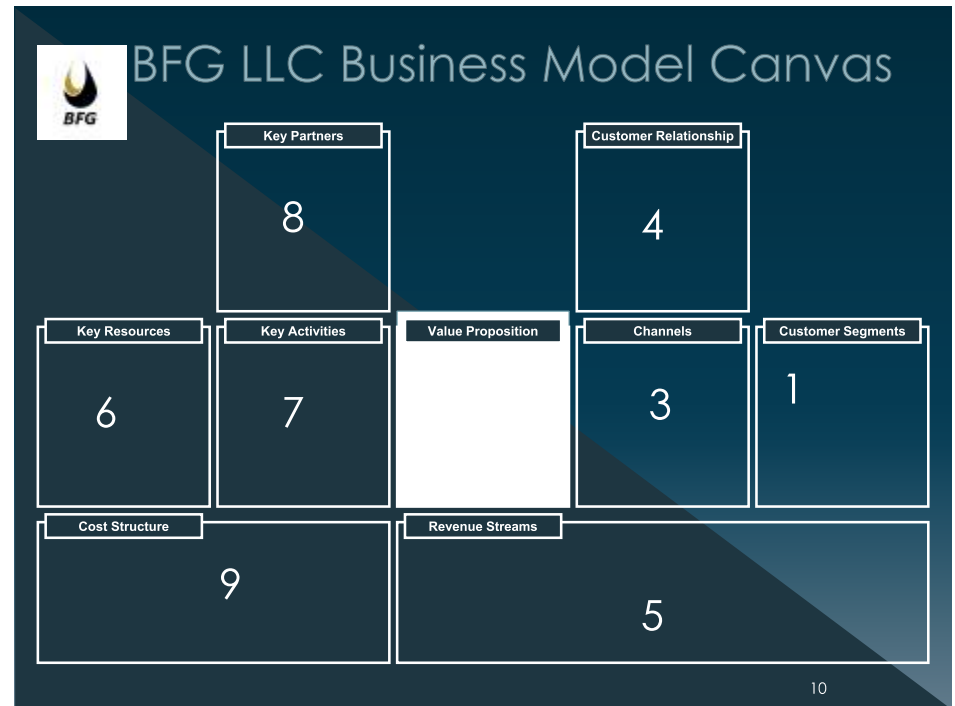
8

2. Value Proposition

- Answer the following questions about each product/service you offer
 - > Define customer segment
 - > What compelling benefits does your product/service have?
 - > Price? (consider channel margins)
 - > Demonstrate VP superiority to competitors?
 - (even distal alternatives)
 - > Evidence of demand and financial returns
 - > Is it Clear & Simple? -Think focused, brief and sharp
 - > How do you deliver the value proposition?
 - > Quantify where possible
 - > Is this your best VP or could you make it better?

Source: Lanning & Michaels (1988)
McKinsey Staff Paper

9



10



2. BFG Value Proposition for Pro Lumber Dealers

- Pro Lumber Dealer
 - > Offer a line of affordable pellets for customers – bulk buy for winter needs
 - > Low merchandising & service
 - (truckload and pre-buy options only)
 - > Cost (\$240/Ton), low service are drivers here
 - > Overall volumes are lower versus big box
- Contrast vs. Big Box Retail
 - > Cost (\$220/ton) Volume buy multiple stores, etc.

11

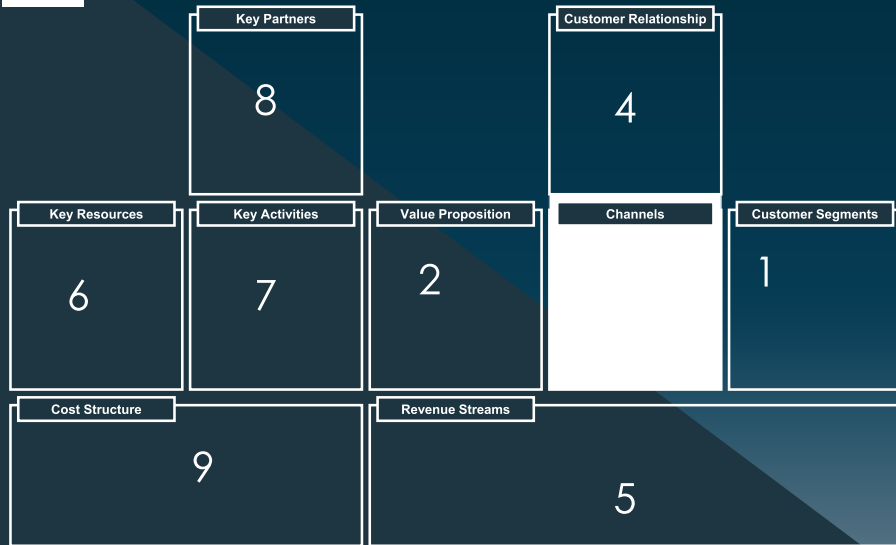
3. Channels

- Means to deliver your product/service to customer segments
- Examples
 - > Direct: you sell to consumers
 - Farmer's market, retail store, online sales, restaurant sales, etc.
 - > Intermediaries – additional steps to reach consumer
 - wholesalers, brokers, retail, etc.
- Channel choices differ by:
 - > Costs
 - > Service needs
 - > Time to market
 - > Volume and customer reach
- Your channel strategy can change
 - > Growth, product/service popularity, etc.
 - (Hint-build in margin to add intermediaries)

12



BFG LLC Business Model Canvas

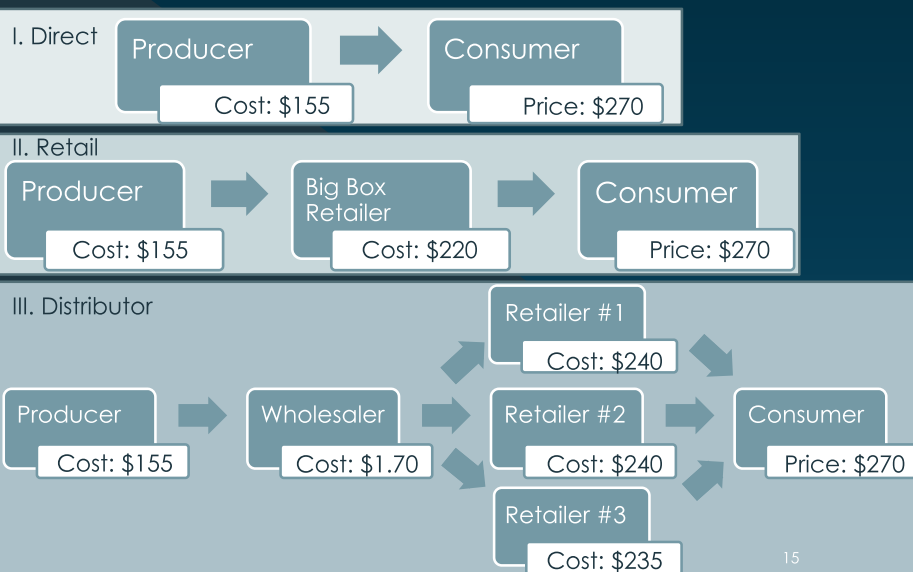


3. BFG LLC Potential Channels

- Direct to consumer
 - > Online
 - > Physical location
- Pro Lumber Dealer
- Big Box Retailer
- Specialty Heating Retailer
- Broker wholesaler
- Stocking wholesaler
- Exporter



3.A BFG LLC Channel Integrity



3.B BFG LLC Channel Partner Demands

Big Box Program Considerations

- Exclusive market distribution
- Payment terms and credit limit
- Pricing structure based on their customers and reach to consumer
- Early preview to market announcements/price changes
- Volume & growth rebates
- Slotting fees, marketing funds, co-op program & channel programs
- Display allowances, samples & literature
- Conversion allowance
- Start-up cost assistance - opening discounts, dating, consignment & cost guarantee
- Buy back, guaranteed sale, slow moving items trade out, etc.
- Initial stocking inventory –matching velocity
- Lead times, minimum order, freight arrangements FOB vs. prepaid
- Sales and merchandising support & product samples
- Defective product procedures and safety considerations
- EDI capabilities
- Specialist and sales support
- Guaranteed time period to distribute

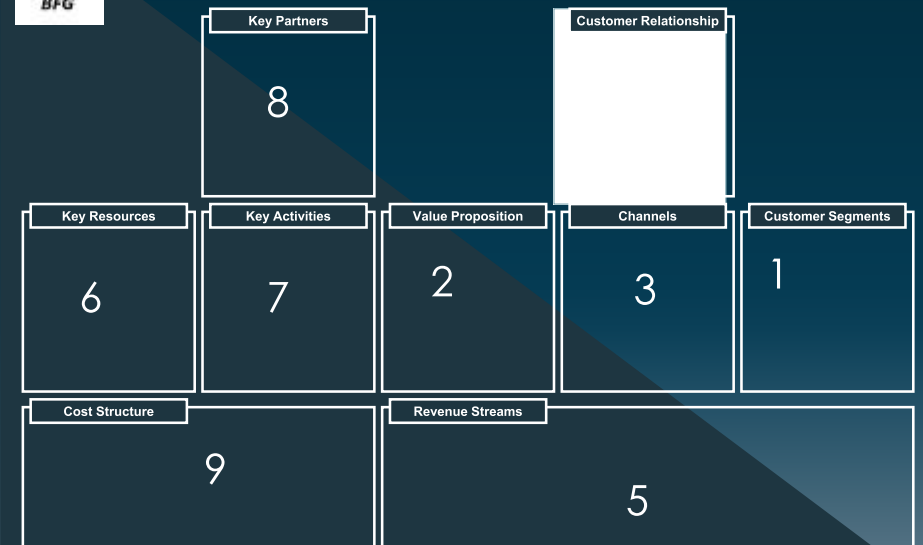
4. Customer Relationships

- Voice of the customer
- Customer courtship process
 - > Do business with the right people
 - > Obtain references & utilize your network
 - > Clear expectations early
 - > Know every detail & implications in agreements
 - > Saying no at times can be the best decision
 - Especially early on
 - > Know what you bring to the table
 - Also what you don't
- Transactional vs. relational
- Cost of acquiring customer and relationship service
 - > Degree of rebuy

17



BFG LLC Business Model Canvas



18



4. BFG LLC Customer Relationships

- I. Big Box
 - I. High service
 - II. Rigorous program parameters, analytics and expectations
 - III. Volume and price competitive
- II. Broker (non-stocking)
 - I. Transactional, price driven, low service

19

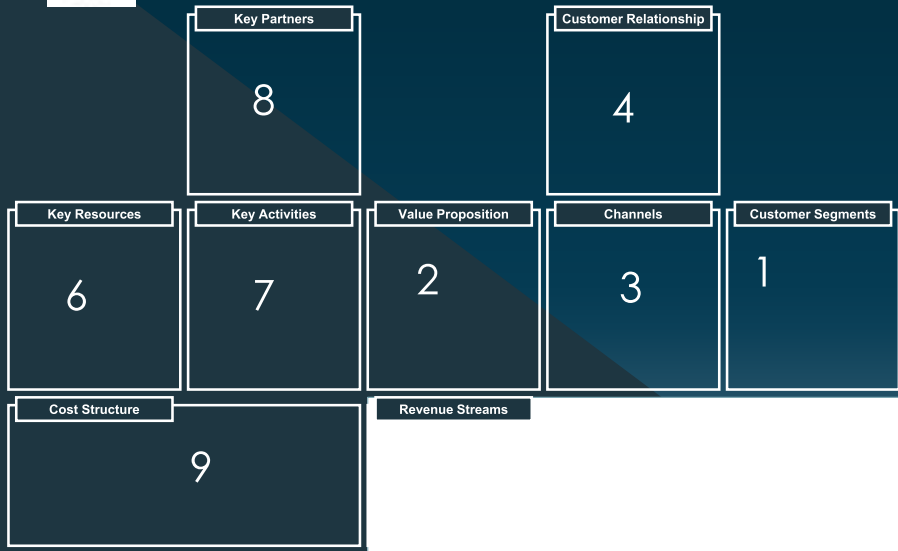
5. Revenue Streams

- Inflows of sales building the Top line of your business
- Revenue streams can be separated by channel, customer and product/service
- Think about key levers you can employ to grow revenues – consider the costs of servicing each stream

20



BFG LLC Company Business Model Canvas

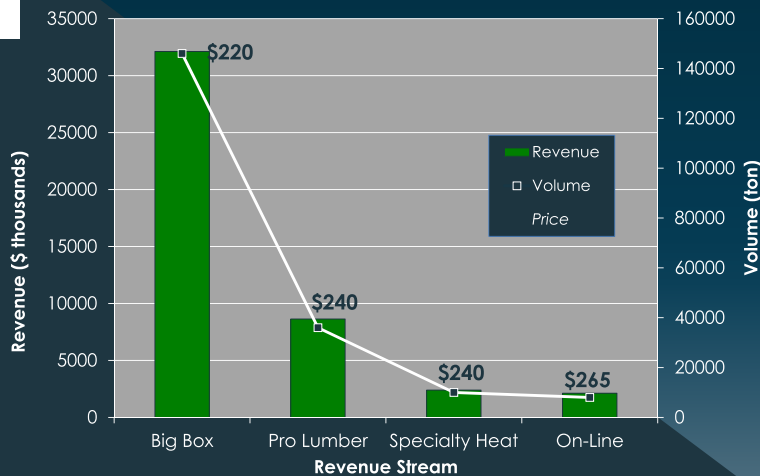


5. BFG LLC Revenue Streams

- Assumptions
 - Plant produces 200,000 tons annually
 - One product line –Palletized 40lb bags
 - Revenue mix
 - 73% Big Box Retail @ \$220/ton
 - 18% Pro Lumber @ \$240/ton
 - 5% Specialty Heating Store @ \$240/ton
 - 4% online @ \$265 ton



BFG LLC Annual Revenue Streams

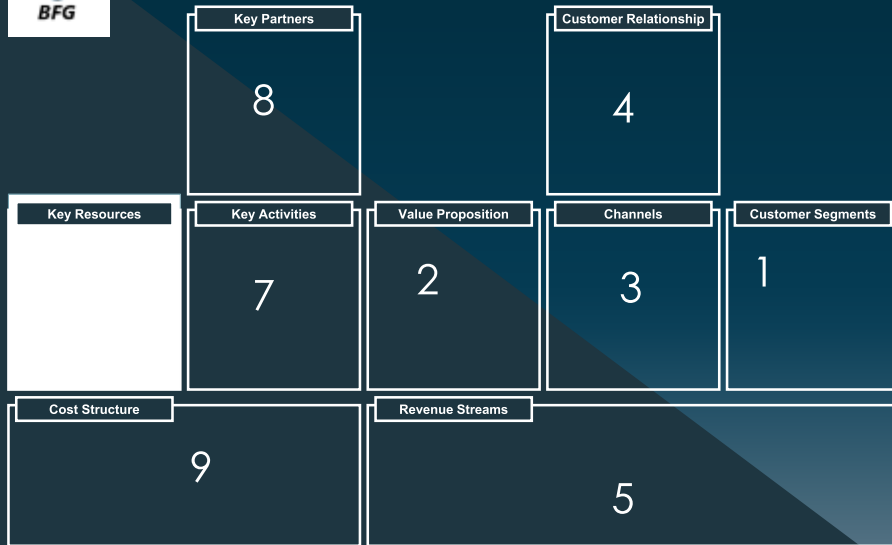


6. Key Resources

- Consider the essential resources to successfully operate your business
 - People
 - Capital & Equipment
 - Financing
 - Acreage & Facilities
 - Know how
- Growth will require an infusion of resources
 - Especially cash –Don't get caught short during the drive to grow



BFG LLC Business Model Canvas



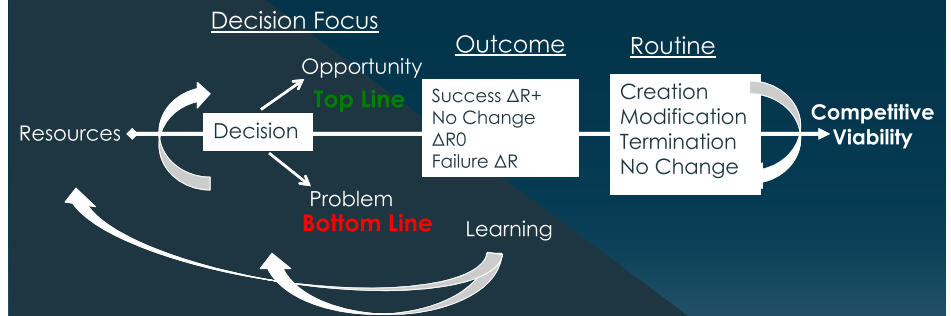
6. BFG LLC Key Resources

- State of the art facilities and equipment
- Production knowledge and experience
- Cash working capital
- Industry connections
- Established channel position
- Brand awareness

7. Key Activities

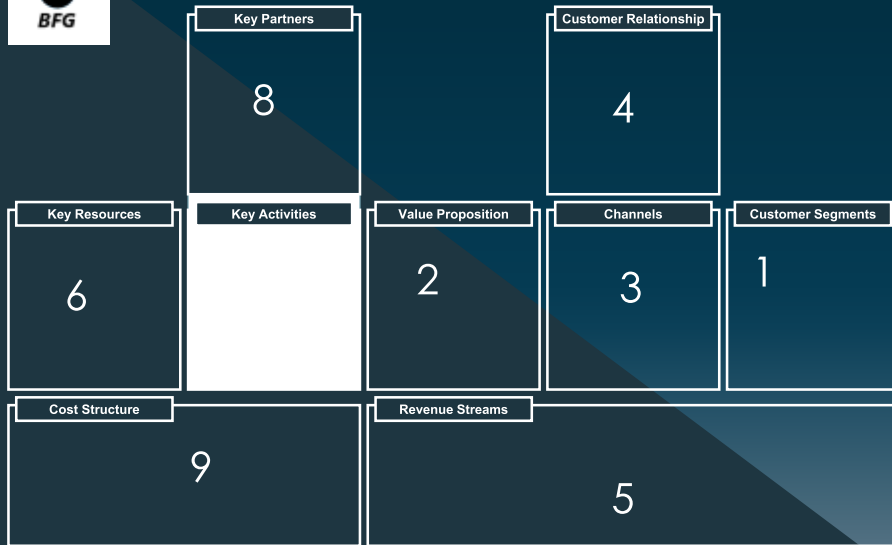
- Consider the actions and routines that are essential to operate your business
- What decisions are you making?
- Rank your activities that create the most value
- Opportunity activities grow revenues (top line) and Problem mitigation activities grow your profit (bottom line).
- Rank your company routines by value and by efficiency

7A. Key Activities –Resources & Decisions





BFG LLC Company Business Model Canvas



29



7. BFG LLC Key Activities

- Daily production
- Material sourcing
- Sales & marketing
- Financial accounting (invoices, accounts, etc.)
- Shipping logistics
- Plant safety

30

8. Key Partners

- List the key partners that help facilitate the success of your business

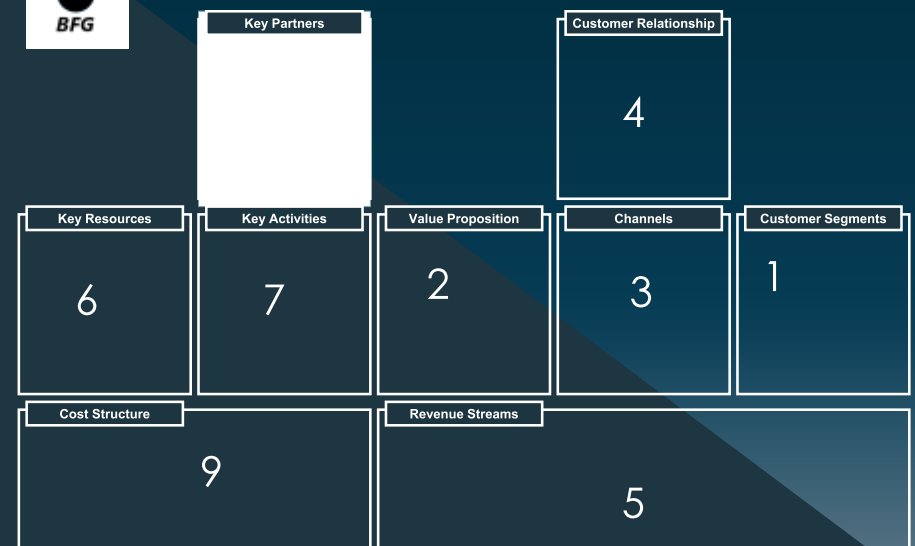
- > Financial/Banking
- > Professionals
 - Legal, insurance, etc
- > Suppliers
- > Customers
- > Channel members
 - Distributors
 - Brokers



31



BFG LLC Business Model Canvas



32



8. BFG LLC Key Partners

- Employees
 - > Experienced Plant Manager
 - > Dedicated team of 10 employees
- Loggers
 - > Hout's Logging inc.
- Professional Services
 - > Merchandising company for big box
 - > MEDIA TECH, IT support/design firm
 - > Lawyer, Insurance, Accountant
 - > Environmental consulting and engineering
- Customers
- PA Bank & Trust

33

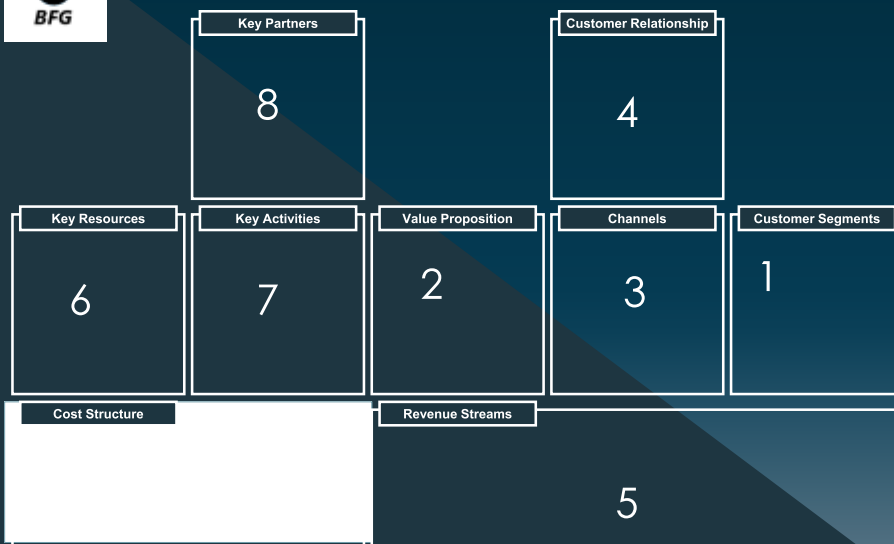
9. Cost Structure

- Consider major cost drivers
- Examine costs of maintaining routines
- Be on the lookout for hidden costs
- Are their value drains that you can terminate or avoid?
- Seek ways to leverage resources and preserve cash

34



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35



9. BFG LLC Cost Structure

Major Cost Drivers

- Wood Fiber (\$70/ton dry)
- Production Costs (\$23/ton)
- Maintenance (\$5/ton)
- Labor (\$7/ton)
- Sales and Marketing
 - > Merchandising
 - > Broker fees
 - > Retail program costs

36

Thank you

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Pellet data sources: Lu and Rice, 2011; Qian and McDow, 2013