Perez POPS POS

Saturday, April 30, 2022 11:01 PM

affiliate@creality3d.shop

From <https://creality3d.shop/pages/affiliate-program>

Milton Overton (Director of Athletics)
Moverton@kennesaw.edu

Tuesday, May 3, 2022 3:29 PM

It was wonderful to meet with you at the Senior Design Exposition Tuesday. As discussed, attached below is our Sponsorship Packet. We would love to meet with you at a later date and discuss this further.

Solvay (Bryan Benson) Bryan.Benson@solvay.com

Tuesday, May 3, 2022 3:37 PM

It was wonderful to meet with you at the Senior Design Exposition Tuesday. 6

New Member Recruitment - 2022

Wednesday, July 27, 2022 8:05 PM

New Member Classes

Business Class 2022

Misc.

- Rules test

Outreach

- Society of Women in Engineering
- KSU campus marketing group

Follow up After Team Recruitment Meeting

Hey! Thank you for showing interest in the business side of KSU Motorsports. I'm absolutely stoked to have you on the team! To help me help you plug in, please let me know what (if any) previous experience you have in business-related things and how you see yourself engaging in our business team.

I will also be hosting a class covering the business team's goals and roles. This class will be held on two different days: Friday, September 9th at 7:00PM and Monday, September 19th at 7:00PM.

Business Class Reminder

Hey! We're having a business class for the KSU Motorsports team tomorrow at 7pm and Monday the 19th at 7pm. Hope to see you at one of them!

Items to take over

- Event Coordination – on campus industry Speakers coming in (SAE) Oct. 21st
  - Directional flyers for off-campus guests and speakers
  - Marketing flyers
- Event Coordination – Alumni Board Presentation
  - Cost presentation for approval
- SABAC meeting
  - Cost presentation for approval
- Marketing Internal
  - Re-design board in hallway across from workshop
  - Tablecloth for events box
- Comp Presentations
  - Cost and statics presentation basics with John
  - Slide show and notebook aesthetics
  - Meetings with Sarah and SAE Int'l
- Sponsor Relationship Management
  - Board Teams w list of sponsors & gifts
  - Formal sponsor event – sales pitch and semester goals
  - Sponsor newsletters
- Social Media Manager & Photography
  - Develop timed posts
  - Newsletters – successes & events

Sponsor Relationship Management

Tuesday, October 11, 2022 6:17 PM

Sponsor Engagement Ideas

- List of past sponsors
- Research other local companies (non-engineering) to sponsor
- Survey & panel
  - How did you find us
  - What do you care about
  - Would you be interested in attending an event?
  - How can we better engage you in the team?
- Invite to Invitational
- Go to them (their events or at their facilities)

Meetings with faculty and sponsors

- Show off car(s)
- Present goals
- Sponsor meeting December 5th week (?)
- Give practice presentation to school development
- Faculty meeting mid-January (?)
  - Reach out to Dean about the faculty meeting

Action Items

1. Pull out list of sponsors; categorize and update list (Marco)
   a. Meeting with money guy – gather data from (John)
   b. Siemens reach out (Marco)
   c. Engagement email recapping Barnesville (Sam)
2. Develop engagement survey for sponsors (Brittanie)

More Items for Discussion

Photography
Videography (Alex was a film major)
Brand Development
Leverage SAE Chapter Network
Alumni special edition merch raffle

Developing Marketing Strategy

Meeting with George Ayres

The KSU Motorsports business team is creating a marketing strategy focused on sponsor relationship development. This is a new element for the team, which has prioritized technical team development in the past. We have experienced many recent successes with both of our vehicles in competition and are now seeking to develop the business side to the same degree of excellence.

Basics of a Marketing Plan

https://www.forbes.com/sites/rhettbuttle/2021/01/12/five-essential-elements-of-a-marketing-plan-for-a-small-businesses/?sh=7f973895259c

https://www.inc.com/theupsstore/seven-essential-components-to-a-marketing-plan.html

EXHIBIT 1.10 Contents of a Marketing Plan

Section	Content
I. Executive summary	Presents a short overview of the issues, objectives, strategy, and actions incorporated in the plan and their expected outcomes for quick management review.
II. Current situation and trends	Summarizes relevant background information on the market, competition and the macroenvironment, and trends therein, including size and growth rates for the overall market and key segments.
III. Performance review (for an existing product or service only)	Examines the past performance of the product and the elements of its marketing program (e.g., distribution, promotions, etc.).
IV. Key issues	Identifies the main opportunities and threats to the product that the plan must deal with in the coming year and the relative strengths and weaknesses of the product and business unit that must be taken into account in facing those issues.
V. Objectives	Specifies the goals to be accomplished in terms of sales volume, market share, and profit.
VI. Marketing strategy	Summarizes the overall strategic approach that will be used to meet the plan's objectives.
VII. Action plans	This is the most critical section of the annual plan for helping to ensure effective implementation and coordination of activities across functional departments. It specifies • The **target market** to be pursued. • **What** specific actions are to be taken with respect to each of the 4 Ps. • **Who** is responsible for each action. • **When** the action will be engaged in. • **How** much will be budgeted for each action.
VIII. Projected profit-and-loss statement	Presents the expected financial payoff from the plan.
IX. Controls	Discusses how the plan's progress will be monitored; may present contingency plans to be used if performance falls below expectations or the situation changes.
X. Contingency plans	Describes actions to be taken if specific threats or opportunities materialize during the planning period.

Syltech Sponsor Email

Good morning,

My name is Steven Tubbs, and I am reaching out on behalf of Kennesaw Motorsports. We are a Collegiate Formula SAE team from Kennesaw, Georgia, USA. We have been looking for a new suite of sensors to use on our Internal Combustion (IC) car and came across your sensor lineup. The native use of DTM connectors on your sensors stood out, as we currently utilize the Deutsch lineup to construct the wiring harness for our cars. Having the connector built directly into the sensor housing would allow us to simplify our wiring and decrease the number of failure points in our system. Other combination sensors are sold on the market, but none complement our needs better than yours. We would love to partner with you and bring light to your lineup in our competition series and across the United States. Let me know if we can work something out!

Sincerely,
Steven Tubbs

Ayres Notes:

- Include percentile of teams performance, put our performance in context
- Elaborate more into the "impression" of the exposure the sponsor would get from sponsoring our team
- Overall provide more material to our sponsors and more in depth analysis and context as to what they are getting with our money
- "Car and a bunch of students" as to platinum level
- "Decal preview on the shirt" titanium level
- Become very local into what sponsors we reach out

SMART Goals
https://corporatefinanceinstitute.com/resources/knowledge/other/smart-goal/

Connect through SAE chapter network

1. Marketing Plan & Strategy
   a. Meeting with George Ayres Nov. 10th 4:30pm
2. Start Invitational Planning
3. Sponsor Stuff
4. Branding Stuff
   a. Merch
   b. Flyers
   c. Banners/Tables/Bullet Boards
   d. Website
   e. Social Media

FSAE Teams List

Friday, July 8, 2022 8:09 PM

Full List: https://www.formulastudent.de/teams/fsc/#c-United%20States

United States Teams

Akron	The University of Akron	Zips Racing
Ann Arbor	University of Michigan - Ann Arbor	MRacing
Arlington	University of Texas at Arlington	UTA Racing
Atlanta	Georgia Institute of Technology	GT Motorsports
Auburn	Auburn University	War Eagle Motorsports
Austin	University of Texas at Austin	Longhorn Racing
Baton Rouge	Louisiana State University	TigerRacing
Bellingham	Western Washington University	Western Washington University Formula SAE
Cincinnati	University of Cincinnati	Bearcat Motorsports
Columbia	University of Missouri	Mizzou Racing
Columbus	The Ohio State University	Formula Buckeyes
Corvallis	Oregon State University	Global Formula Racing (US)
Dearborn	The University of Michigan-Dearborn	The University of Michigan Dearborn Formula SAE
Denver	Regis University	Regis Uni FS Team
East Lansing	Michigan State University	Michigan State University Formula Racing Team
Fullerton	California State University, Fullerton	Titan Racing Formula
Gainesville	University of Florida	GatorMotorsports
Ithaca	Cornell University	Cornell University
Lawrence	University of Kansas	Jayhawk Motorsports
Madison	University of Wisconsin-Madison	University of Wisconsin-Madison Formula SAE
Mankato	Minnesota State University, Mankato	MNSU Motorsports
Mobile	Spring Hill College	SpringHill FS
Norman	University of Oklahoma	Sooner Racing Team
Northridge	California State University, Northridge	Matador Motorsports
Orem	Utah Valley University	UVU Racing
Orlando	University of Central Florida	Knight's Racing
Philadelphia	Drexel University	Drexel Racing
Pittsburgh	University of Pittsburgh	Panther Racing
Platteville	University of Wisconsin-Platteville	Pioneer Racing
Pomona	California State Polytechnic University, Pomona	Cal Poly Pomona Formula SAE

Rochester	Rochester Institute of Technology	Rochester Institute of Technology
Rochester	Oakland University	Oakland University Formula SAE
Rolla	Missouri University of Science and Technology	Missouri Science and Technology Racing
San José	San José State University	Spartan Racing
Seattle	University of Washington	UWashington Formula Motorsports
Southfield	Lawrence Technological University	Blue Devil Motorsports
Tampa	University of South Florida	University of South Florida
Troy	Hudson Valley Community College	Loki Motorsports
University Park	Pennsylvania State University	Penn State Formula Racing
Urbana	University of Illinois at Urbana-Champaign	Illini Motorsport
West Lafayette	Purdue University - West Lafayette	Purdue FSAE

Shirt Ideas

Tuesday, August 9, 2022 12:17 PM

Fronts

Backs

Back: Full

Change Product Side

Southern Invitational 2023

Tuesday, June 28, 2022 4:40 PM

Event Overview: *Spring event for teams in the Southeast running acceleration, auto-X, skid Pad, and endurance*

Ideas:

- Take event off-campus?
  - Captain M. D. Hurst Academy Director Cobb County Public Safety Police Training Academy 2435 Rast-West Connector Austell, GA. 30106 **Ph: 770-499-4100**
- 2-day event? Day1 for statics and dynamic events, and SAE lectures/panels (?) Day2 for running cars
  - Where teams could stay (reserve gym and everyone bring a sleeping bag?)
  - Trailer parking (reserve a parking lot)
  - Day2 off campus still?
  - Food?
  - SAE folk accommodations?
  - Sponsor needs? Admission fee?
- Use school parking lot by gym?
- Google forms for signup
- Market to business students on Kennesaw campus?
- Have water barriers (16)
- Schedule lunch breaks specifically for volunteers (also designate shifts)

Questions:

- What is the event budget?
  - $2000
- What do sponsors need?
  - IDK
- How do we communicate with sponsors and participants? List of contacts?
  - Will find sponsor ship
- What is the average attendance count (including spectators and sponsors)?
  - 5 teams (30 members) 5*30=150
- Do we have a website?
  - https://www.ksumotorsports.com/invitational
  - Goal: https://www.pittsburghshootout.com/
- What goes into a tech sheet? Egress sheet? Driver wristband?
  - FSAE tech sheet
  - Post on sight modfied tech sheet.
  - Keep record of drivers
- Need to discuss anything with the dean for using school grounds?
  - No just events dpt
- Do we have access to mic and speaker system?
  - no
- Allow time for track walk? Provide track map for endurance ahead of time/post somewhere day of?
  - People would like it to be posted ahead
  - Need 15 for track walk
- What information do we typically ask at signup?
  - Team, type of car, estimated number of people, sign the waiver
- Where does waiver come from?
- Do the participating teams need to designate event drivers?
  - NO or yes
  - We grade by runs

Marland in parking

Planning Milestones:

January

1. Reach out to offsite options for event
2. Create invite list & reach out to teams to gauge interest
3. Create general budget
4. Gather cost estimates & rough participant numbers
5. Submit SABAC proposal (Stephen going talk with John about it)
6. Meet with Safety Officer (on campus requirement if cars running on campus)
7. Reach out to Manager of Student Centers/Student Affairs and begin processing forms through the school

February

1. Choose which events to run & general track layouts for each
2. Create day-of schedule
3. Designate areas to mark off as needed
4. Create Save the Date & send to both sponsors and participants
   a. Determine scoring criteria & document tech inspection standards; send to teams
5. Dry-run track layouts if possible
6. Create sign-up & send out official invitations (to both sponsors and participants)
7. Create list of day-of roles & assign to teammates & schedule lunch breaks & schedule shifts
   a. Tech Inspectors
   b. Track Crew
   c. Parking Guides
   d. Setup/Takedown/Track Change
   e. Waiver/Admission Fee Table
   f. Food Director
   g. Sponsor Director

March

1. Have teams & sponsors confirm attendance
   a. Confirm estimated attendance to facility and food vendor as appropriate
2. Design & create trophies
3. Ensure we have a way to post results & announce each event
4. Event details packet to sponsors & participants
5. Document spectator instructions & share with teams

April 15th

1. Gather & consolidate items for setup/takedown
2. Create list of key points to be announced throughout event
3. Brief volunteer teams on roles and schedules

May

1. Post-event marketing
2. Event summary to school & sponsors

High Level Action Items:

- Budget
- Create event awareness, internal and external
- Plan event
- Set deadlines
- Provide directions and set expectations, internal and external
- Collect and organize data (make it up)

Action Items Drill Down

Budget

- Determine budget
- Determine event segments & allocate budget to each segment
- Obtain quotes from food vendors
  - Ensure that food vendor will provide all paper goods/plasticware

Create Awareness

- Invite participants and sponsors
  - Confirm teams attending 1 mo. (?) prior
  - Create means for teams to sign up
- Marketing plan
  - Pre-event
    - "Save the Date" event announcement (dates, location, general information) email blast, website, social media, paper flyers around campuses
    - Official Invitations through email blast
    - Announce participating teams after confirming attendance
  - Post-event
    - Pictures from event - specifically pictures of winning overall teams, trophies, track, and sponsors (?)
    - Post results on webpage
    - Thank you emails to participants and sponsors
    - Acknowledgement of sponsor investments in event announcements, on webpage, and social media posts

Plan Event

- Create event day-of schedule
- Design and create trophies
- Designate areas for food vendor(s), trailer parking, general parking, tech inspection, and sponsor booths
  - Means to block off the different sections, especially paddocks and spectator viewing area
- Dry run track layouts for each event
- Determine best way to post results of each event
- Determine best way to announce events
- Reach out to offsite options for event
  - Confirm parking lot use with school if this does not come to fruition
- Determine key points that need to be announced throughout event
- Ensure we have:
  - Leaf blower?
  - Tables, chairs (KSU delivers…but usually incorrect quantity. Allow for time to adjust/request more.)
  - Coolers
  - First aid
  - Signage with directions to bathroom & to designate sponsor booths
  - Breakfast for setup team
  - Power strips (timing booth and speaker system)
- Spectator instructions (i.e., stay off the track)
- Water barriers for separating tracks if needed: https://www.sunbeltrentals.com/equipment-rental/7000065/barrier-wall-water-filled/

Provide Direction/Set Expectations

- Determine scoring criteria
- Document tech inspection standards
- Select & train tech inspectors
  - Create clipboards with checklist of inspection standards
- Select & train track crew
  - Designate locations for flag marshal stations and fire extinguishers
  - Review flags, track layout, order of events, and event details
- Select & train parking guides for paddocks and gen. parking
- Provide participants with…
  - Itinerary, tech sheets, and scoring criteria month (?) prior to event
  - Parking details/map, event track, other instructions, week (?) before event
  - Main contact number
- Review flags with drivers
- Setup and takedown teams
  - List of action items in chronological order
  - Map of overall event layout (parking and all)
  - Maps of event tracks
  - Designate place to return all items used in setup/takedown, especially if we're off-campus

Collect/Organize Data

Squad Tasks Brainstorm

Thursday, April 13, 2023 8:10 PM

Track1

- Flag Wavers (3)
- Hot Queue Guide (Will need one more person for AutoX) (1) (Pull from squad on break)
- Start Line (1)

Track 2

- Flag Wavers (3)
- Cone Caller/Stray Spectator (1)

Admin
Morning Time (Pre Event)
During Event

- Speak with Steven Each Rotation

Auto X
Track 1

- 3 Flag Wavers
- 1 Hot Queue
- 1 Start Line

Track 2

- 3 Flag Wavers
- 1 Cone Caller/Spectator Watch

Endurance
Track 1

- 2 Flag Waivers
- 1 Cone Caller
- 1 Buddy/Free Goon

Track 2

- 2 Flag Waivers
- 1 Hot Queue
- 1 Start Line

Acceleration
Track 1

- 1 Start Line
- 3 Goons

Track 2

- 1 Hot Queue
- 1 Corner Worker
- 2 Goons

Lead Meeting

- [ ] Responsibilities
  - [ ] Divide tasks to squad members, espescially for autx/endurance
  - [ ] Make sure there are no shenanigans, and people are safe
  - [ ] Hot queue for each track event
    - [ ] You will order cars in the hot queues, communicate with sammy for clearance, and direct next team to the line
    - [ ] Heily can run thru
- [ ] Speak with Steven when your squad members are free
- [ ] Refer to these beautiful sheets I made for you (Excel Active Sheet)
- [ ]

FS Meeting 03/30/23

Thursday, March 30, 2023 7:13 PM

Andrew: Make a list of items we need for AV/Music/Announcements

Microphone
Speakers
Electricity
Table
Chairs
Aux cord
Speaker Cablesd

Sam: Itinerary for Tour Groups

- composites - 15 minutes
- dyno - 15 minutes

- shop (machine shop) - 30 minutes (take out that damn formula drift poster)
- back

total: 90 minutes

Corner Worker Stations:

Printing Prices:
Campus Printing:
300 B/W Waivers - $30
100 Color Posters - $50
Office Depot:
500 B/W Waivers - $75
100 Color Posters - 50

Bray: Canopy weights
1. Tires and concrete from O (basically free) *Need fasteners
2. Home depot buckets with water (home depot buckets)
3. Cinderblocks in O (basically free)
   a. All need rope

Wristbands
https://www.amazon.com/WristCo-Variety-Pack-Tyvek-Wristbands/dp/B01NBOTESM/ref=sxin_16_pa_sp_search_thematic_sspa?content-id=amzn1.sym.c8697a08-4071-4b95-a6c6-1805?bcdb898&pd_rd_i=B01NBOTESM&pd_rd_r=2cb57d80-cad9-4e7b-9ce3-4901324c014a&pd_rd_w=gaOqa&pd_rd_wg=5RpFk&qid=1680218240&sbo=RZvfv%2F%2FHxDF%2BC6Q21gAzA%3D%3D&spc=sr=wisthand%2Bwatch%2Cspn%2FC1414&s=1-1-3643978-spa2a-480a-8bb0-bdb9bf0aa0f61-spons&sp_csd=ZWFsc2lnbmVkSVJlXXVhbGlmaWUyPUEwODlCVlBNXlIETEc4JmVuY3JScHRlZlk9PUEwNDY2MTgzOWI2ZlJlYTE4UkE5JmVuY3ScHRlZFk5WQ9OTA0NDE5MEExMEE1NOk5FQkEtUEEmd29kZV0TmFlZT1zLFlrZWFv2hfdGhlbWFOaWMmYWNQaW9uPWNsaWNrc\mVkaXlfY1Qm2G9Qb3RMb2dDbGljay10cmV6&t=1

https://www.amazon.com/WristCo-Smiley-Variety-Wristbands-Yellow/dp/B06XRMKHHJ/ref=sr_1_25?keywords=wristband%2Bpack&qid=1680219782&sr=8-25&th=1

https://www.amazon.com/dp/B06X9G4285/ref=twister_B091JG3936?_encoding=UTF8&th=1

Compare Prices of Packs of Water Bottle (best, alright, okay, no color = last resort)

Costco:
Kirkland Water (8 fl oz, 80 ct, $13.99 per pack, $0.17 per bottle, $0.02 per oz)
https://www.costcobusinessdelivery.com/kirkland-signature-premium-drinking-water%2c-8-fl-oz%2c-80-ct.product.100276911.html

Kirkland Water (16.9 fl oz, 40 ct, $7.76 per pack, $0.19 per bottle, $0.01 per oz)
https://www.costcobusinessdelivery.com/kirkland-signature-purified-drinking-water%2c-16.9-fl-oz%2c-40-ct.product.11982447.html

Walmart:
Great Value Water (16.9 fl oz, 40 ct, $5.36 per pack, $0.13 per bottle, $0.008 per oz)
https://www.walmart.com/ip/Great-Value-Purified-Drinking-Water-16.9-Fl-Oz-40-Count-Bottles/992524020?athcpid=992524020.&athpgid=AthenaContentPage_10010508&athznid=item Carousel_1c7a1374-4792-4ab9-b98b-c28544d20f0a_item&athpltid=pl&athstid=CS020&athguid=2m2kPZ0J_MoDvW10C7y928bewlbvjx_stOnY&athancid=null&athenia=true&athbdg=L1600
Quantity count price: 200ct = $26.80 , 320ct = $42.88 , 5400ct = $53.60

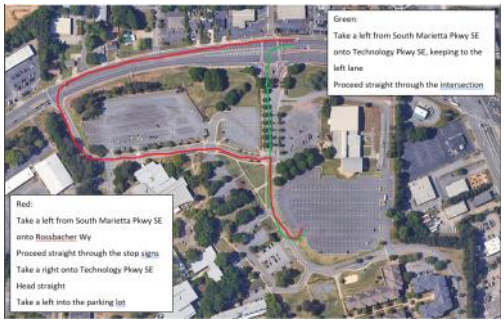
Sam's Choice Water (20 fl oz, 28 ct, $5.28 per pack, $0.18 per bottle, $0.009 per oz)
https://www.walmart.com/ip/Sam-s-Choice-Purified-Drinking-Water-20-Fl-Oz-28-Count-Bottles/353952777?fulfillmentIntent=in-store

Pure Life Water (16.9 fl oz, 35 ct, $5.38 per pack, $0.15 per bottle, $0.009 per oz)
https://www.walmart.com/ip/Pure-Life-Purified-Water-16-9-Fl-Oz-500-mL-Plastic-Bottled-Water-35-Pack/172482307?fulfillmentIntent=In-store&athbdg=L1600

Sam's Club:
Member's Mark Water (16.9 fl oz, 40 ct, $3.98 per pack, $0.10 per bottle, $0.006 per oz)
https://www.samsclub.com/p/members-mark-purified-bottled-water/prod29204747?xid=plp_product_1
Quantity count price: 200ct = $19.90 , 320ct = $31.84 , 5400ct = $39.80

Target:
Good & Gather Water (16.9 fl oz, 24 ct, $3.59 per pack, $0.15 per bottle, $0.009 per oz)
https://www.target.com/p/purified-drinking-water-24pk-16-9-fl-oz-bottles-good-gather-8482/-/A-54407104

Directions to parking lot
(make pretty)



Volunteer Positions:
- Tech (7 + Old Men)
  - Inspectors
  - Helpers
  - Egress here
- Main Tent (3)
  - 1 Announcements
  - 2 Timing
  - Music
- Gear check (2)
  -
- Corner Workers ()

Flags & Fire Extinguishers

From 7 AM -9 AM
(4) people needed for breaks

From 10 AM -12 PM
(2) for accel-2 fire extinguisher
(2) for skitpad-2 fire extinguisher

From 1 PM - 3 PM
(7) for autocross (swap at some point)-need extinguisher for each area?)

From 3 PM -6 PM
(5)for endurance (swap out at some point) -fire extinguisher for each

- Registration Tents (4)
  (x2)
  - Waivers & Wristbands
  - 2 people per tent minimum
- Food (3) (From 12- 1 PM)
  - Servers
  - Card Reader
- Tours (2) (From 1-6 PM)
  - Drivers are the Tour Guides
  - Tour Guides

- Car Teams

IC- Group (3) + drivers (2)

Crew	Driver's
1 hailey	Bray
marco	bronDong
seth	N/A

EV - Group (3) + drivers (2)

Crew	Driver's
Val	Andrew
Jonathan	Mihai?
Bailey?	N/A

Flagging:

Flag Color	Meaning
	Black Flag: Pull into Driver Change area for debrie
	Blue Flag: Pull into designated passing zone to be past by faster comp to merge into comp
	Checkered Flag: Run or complete. Exit c
	Green Flag: Approval to begin run, enter course under direction of the Green Flag
	Red Flag: Come to an immediate safe controlled stop on the course. corner worker. Bra
	Yellow Flag: Danger, SLOW DOWN, be prepared to take evasive act direction(s)
	White Flag: Slow moving vehicle on course. Be pre
	Red and Yellow Flag: Something on course that should not be there

Flag Colors and Mean...

ction. Time penalty may be assessed.	Black Flag with Orange Dot: Pull into Driver Change Area for mechanical inspection, an issue has been observed and needs
ector. Obey corner worker signals at end of passing zone	
ection.	
ourse or designated zone.	
starter. If you stall the vehicle, restart and await another	
hall to the side of the course as much as possible. Follow	
ions.	
on, BE PREPARED TO STOP, listen to corner worker	
pared to approach at a cautious rate.	
Be prepared for evasive action to avoid the situation.	

SABAC Meeting 3/15

Thursday, March 9, 2023 1:01 PM

Email #1

Attention: Kennesaw Motor Sports: Steve Tubbs,

1.) Has Kennesaw Motor Sports gotten approval from Campus Safety and EHS for the 2023 Formula South Invitational?
2.) Also SABAC needs updated quotes for Public Safety and Medical services. Please send this information to SABAC@kennesaw.edu.

Please send updates to SABAC@kennesaw.edu. Do NOT changes in OwlLife. Please gather all the information and send it to sabac@kennesaw.edu and have those updated quotes in your presentation for the virtual SABAC Supplemental meeting for 3/15 @ 3:30pm. You will get an email with the agenda and teams link soon.

Sincerely,
Melissa Kohring

Email #2

Attention RSO Students & Advisors:

You are receiving this email because you or the RSO you are connected with submitted a SABAC Supplemental Budget Request. That request has been added to the SABAC Supplemental Meeting Agenda for **Wednesday, March 15, 2023 at 3:30pm-5:30pm**. Please find the attached SABAC agenda.

We encourage ALL requesters or an RSO representative to;

1. **Attend** this virtual Supplemental Meeting
2. **Create** a PowerPoint presentation featuring all up-to-date related documentation for your requests. Have your PowerPoint available, open, and ready to present.
3. **Be prepared** to address any questions that arise from your request. The teams link is below.
4. For Travel Request – We strongly recommend that you make sure to address how your request will benefit the KSU community as a whole.

Meeting Link
https://teams.microsoft.com/l/meetup-join/19%3aulNOfqmS5xku2isiYSoDnBc41rc-Vx79-X-ASqCC-o1%40thread.tacv2/1660752057398?context=%7b%22Tid%22%3a%2245f26ee5-f134-439e-bc93-e6c7e33d61c2%22%2c%22Oid%22%3a%2245815850-6623-4e63-a2a0-7ba8869d87ab%22%2c%22Messageid%22%3a%2216607526033639%22%7d

Sincerely,
Melissa Kohring

Email #3

Attention: Kennesaw Motorsports: Steven Tubbs,

You are receiving this email because you or the RSO you are connected with submitted a SABAC Supplemental Budget Request. That request has been added to the SABAC Supplemental Meeting Agenda for **Wednesday, March 15, 2023 at 3:30pm**.

Important Note:

- There was no catering quote attached to your request. Please get an actual quote from JD's BBQ. Please email this quote SABAC@kennesaw.edu and have the quote ready and included in your power point presentation for the virtual meeting on 3/15 at 3:30pm.

We encourage ALL requesters or an RSO representative to;

1. **Attend** this virtual Supplemental Meeting
2. **Create** a PowerPoint presentation featuring all up-to-date related documentation for your requests. Have your PowerPoint available, open, and ready to present.
3. **Be prepared** to address any questions that arise from your request. The teams link is below.
4. For Travel Request – We strongly recommend that you make sure to address how your request will benefit the KSU community as a whole.

Meeting Link
https://teams.microsoft.com/l/meetup-join/19%3aulNOfqmS5xku2isiYSoDnBc41rc-Vx79-X-ASqCC-o1%40thread.tacv2/1660752057398?context=%7b%22Tid%22%3a%2245f26ee5-f134-439e-bc93-e6c7e33d61c2%22%2c%22Oid%22%3a%2245815850-6623-4e63-a2a0-7ba8869d87ab%22%2c%22Messageid%22%3a%2216607526033639%22%7d

Best wishes,
Dean of Students

What SABAC asked for:

Approval
Campus Safety - Approved
EHS - Approved

Updated Quotes
Medic - Acquired - Approved
Public Safety - Acquired - Approved
JD's BBQ - Acquired - Approval Pending

Task List:

- EHS
  - Event Request Form - Approved
  - Tent Layout Form - Not Completed
  - Fire Extinguisher Request Form - Not Neccessary
- EMS
  - On-Campus Event Form - Approved
  - Catering Request Form - Completed
- Metro Atlanta Ambulance Services
  - Quote Received
  - Follow-up Sent - No Reply
- Event Medics
  - Quote Received
  - Quote Rejected
- Campus Police
  - Quote Received
  - Follow-up Required
- Student Activities
  - Schedule meeting with Louise - Completed
  - Schedule meeting with Randall - Completed
- SABAC
  - Supplemental Funding Request Submitted
  - Request Approved
- JD's BBQ
  - Quote Requested
  - Follow-up Sent - No Reply
- Events and Venue Management
  - Request Submitted
  - Update required
  - Update Provided
  - Request Finalized
  - Request Approved

2023FS_IC_Tech_Sheet

2023FS_EV_Tech_S...

Contacts:

- Food (JD's BBQ)
  - Rossi Lott
  - RossiLott@jdsbbq.com
- Campus Police
  - Captain Tim Murphy
  - (770) 364-2688
  - tmurphy@kennesaw.edu
- EHS
  - Alan Blake
  - (404) 323-8239
  - ablake13@kennesaw.edu
- Student Affairs
  - Randall Bogard
  - rbogard@kennesaw.edu
- Office of Alumni Services
  - Frances Beusse
  - fbeusse@kennesaw.edu
- Office of University Development
  - Dr. Robert Shippey
  - rshippey@kennesaw.edu

Volunteer Positions:

- Tech
  - Inspectors
  - Helpers
- Main Tent
  - Announcements
  - Timing
  - Music
- Corner Workers
  - Flags & Fire Extinguishers
- Registration Tents (x2)
  - Waivers & Wristbands
  - 2 people per tent minimum
- Food
  - Servers
  - Card Reader
  - 3 people
- Tours
  - Drivers for golf carts
  - Tour Guides

03/17/2023

Setup
Volunteers
Jobs

May have to put fuel in corner
Tech line

Finalize tracks this weekend

Still need to email sponsors

Need to update teams for tracks

Contacting cops before hand to meet us up the Friday afte

Hot Queue lane

How does paddock flow fork (flip paddock?)

Mark No spectator zone

Sponsors go under trees?

Registration tent

Gate watchers

Main tent location

Grill in handicap corner

Parking and registration help
Need people to rotate out

Track worker training

Need to get enough wristbands and waivers printed

Need to print posters

Rent AV Stuff

Tours after lunch for 3-4 hours

Brakes testing start at 8

Track swap during lunch (have them eat first)

Endurance (Dependent on events)

Food setup

Alumni must need to sign in to spectate

rnoon to ensure no cars remain

Barnesville 2022

Friday, July 1, 2022 10:47 PM

Event Overview: *Fall event for teams in the Southeast. Runs various auto-x track iterations.*

High Level Action Items:

- Budget
- Create event awareness, internal and external
- Plan event
- Set deadlines
- Provide directions and set expectations, internal and external
- Collect and organize data (make it up)

General Questions:

Rename event to something more catchy?
Track alternatives: Charlotte, NC; Atl Motor Speedway; Lanier Oval; AMP; Jacksonville, FL;

Planning Milestones:

July

1. ~~Breakdown event segments~~ for budget allocation ($2,000)
   a. Submit SABAC forms
2. ~~Validate invite list~~ & reach out to teams to gauge interest
3. ~~Contact speedway~~ & school about hosting
4. Choose ~~which events to run~~ & general track layouts for each
5. Design & create trophies (also do the ones for Invitational)
6. Create day-of schedule
7. Determine scoring criteria & document tech inspection standards
   a. For Reference: https://www.pittsburghshootout.com/handbook

August

1. Dry-run track layouts if possible
   a. $40-50/driver at Speedway (?) to run practice laps on an off-schedule day
2. Confirm facility & plan how to mark off areas/direct people
3. Create Save the Date & send to both sponsors and participants
   a. Provide scoring criteria & document tech inspection standards
4. Create sign-up & send out official invitations (to both sponsors and participants)
5. Confirm budget amounts

September

1. Have teams confirm attendance
2. Ensure we have a way to post results & announce each event
3. Create list of day-of roles & assign to teammates
   a. Tech Inspectors
   b. Track Crew
   c. Parking Guides
   d. Setup/Takedown Teams

October

Event Date Oct. 14th-15th

1. Gather & consolidate items for setup/takedown
2. Confirm estimated attendance to facility and food vendor as appropriate
3. Document spectator instructions & share with teams
4. Event details packet to sponsors & participants
5. Create list of key points to be announced throughout event

November

1. Post-event marketing
2. Event summary to school & sponsors

Action Items Drill Down

Budget

- Budget: $2,000 (?)
- Allocate budget to each event segment:
  - Setup/Breakdown
    - Large directional signage
    - Chaulk for line markers
  - Food
  - Facilities
    - Rental
    - Insurance
  - Travel (& Accommodations ?)

Create Awareness

- Invite participants
  - Confirm teams attending 1 month prior
  - Create means for teams to sign up
- Marketing plan
  - Pre-event
    - "Save the Date" event announcement email blast, website, social media
      - Event dates & location
      - Provide contact for questions
      - BOYG – Bring Your Own Gin…erators
    - Official Invitations through email blast
    - Announce participating teams after confirming attendance
  - Post-event
    - Pictures from event - specifically pictures of winning overall teams, trophies, track, and sponsors (?)
    - Post results on webpage
    - Thank you emails to participants
    - Acknowledgement of sponsor investments in event announcements, on webpage, and social media posts

Plan Event

- Choose dates for event
- Reach out to Speedway
  - John visited 7/16
- Create event day-of schedule & choose which events to run
  - Events: auto-x all day
  - Driver practice runs
- Design and create trophies
- Plan areas for trailer parking, general parking, tech inspection, and camping
- Choose track layout for each event
- Determine best way to post results of each event
- Determine best way to announce events
- Reach out to offsite options for event
  - Confirm parking lot use with school if this does not come to fruition
- Determine key points that need to be announced throughout event
- Ensure we have:
  - Leaf blower?
  - Tables, chairs (KSU delivers…but usually incorrect quantity. Allow for time to adjust/request more.)
  - Coolers
  - First aid
  - Signage with directions to bathroom & to designate sponsor booths
  - Breakfast for setup team
  - Power strips (timing booth and speaker system)
  - Seat belt cutters
  - Gloves
- Spectator instructions (i.e., stay off the track)
- Water barriers for separating tracks if needed: https://www.sunbeltrentals.com/equipment-rental/7000065/barrier-wall-water-filled/

Provide Direction/Set Expectations

- Determine scoring criteria
- Document tech inspection standards
- Select & train tech inspectors
  - Create clipboards with checklist of inspection standards
- Select & train track crew
  - Designate locations for flag marshal stations and fire extinguishers
  - Review flags, track layout, order of events, and event details
- Select & train parking guides for paddocks and gen. parking
- Provide participants with…
  - Itinerary, tech sheets, and scoring criteria month (?) prior to event
  - Parking details/map, event track, other instructions, week (?) before event
  - Main contact number
- Review flags with drivers
- Setup and takedown teams
  - List of action items in chronological order
  - Map of overall event layout (parking and all)
  - Maps of event tracks
  - Designate place to return all items used in setup/takedown, especially if we're off-campus

Collect/Organize Data

Misc. Information:

KSU Academic Calender:
https://registrar.kennesaw.edu/academic-calendars/fall-2022-academic-calendar.php

Teams to Invite:

- GT Motorsports (GTMS)
  - Nick Slacanin Team Lead (nickslacanin@gatech.edu)
  - Brett Peloke Chief Engineer (bpeloke6@gatech.edu)
  - gtms@gatech.edu
- Hy-tech (GA Tech, EV)
  - Anson President (1 508-615-4978)
  - Marc Chief Engineer (646-745-4078)
  - info@hytechracing.org
- Mississippi State (IC)
  - Samuel 1 205-563-2256 (old contact)
  - Maisi 478-308-3289
- University of Georgia (IC)
  - Jackson 1 678-458-6756
  - Taze 1 678-761-1229 (business lead)
  - ugamotorsports@gmail.com
  - *From website - Seth Hibler Team Leader (sethhibler98@gmail.com)*
  - *From website – Jake Lancaster Co-captain (jakeoflancaster@gmail.com)*
- Georgia Southern (EV, ?)
  - sae@georgiasouthern.edu
- University of Florida (Gainesville) - Gator Motorsports
  - http://www.gatormotorsports.com/
  - president@gatormotorsports.com
  - uffsae@gmail.com
- University of Central Florida (Orlando)
  - https://knightsracing.cecs.ucf.edu/?page_id=191
  - Knightsracing@gmail.com
- University of South Florida (Tampa)
  - https://www.bullsracing.com/team
  - saeusf@gmail.com
- University of Alabama (IC)
  - http://www.alabamafsae.com/contact-us.html
  - alabamafsae@gmail.com
- Auburn University (EV)
  - Sydney Walker Business Director (Email: sew0080@auburn.edu)
  - (334) 844-3368
- Clemson (IC)
  - Michael Cloer Team Lead & Chief Engineer (cufsae@g.clemson.edu; (803)389-3022)
  - Toni Tabaku Financial & Logistics Officer (etabaku@g.clemson.edu)
  - http://www.clemsonfsae.com/uc-contact-us
  - cufsae@g.clemson.edu
  - 864-656-1890
- Florida Atlantic
- UNC Charlotte
  - 49ersracing@gmail.com
- NC State
  - packmotorsportsfsae@gmail.com
- Duke
  - dukeuniversitymotorsports@gmail.com
- VATech
  - sbenjamin19@vt.edu
- Tennessee Tech
  - mwdavis@tntech.edu
- Middle Tennessee
  - kws2g@mtmail.mtsu.edu
- LSU
  - FormulaLSU@gmail.com

Team registration cost for Barnesville Shootout 2022. If you need an alternate method of payment, please reach out to us at barnesvilleshootout@gmail.com. Please do not forget that Pit Passes will need to be paid in cash upon arrival at the event.

Task Assignments

Thursday, August 18, 2022 9:36 PM

July		KSU Member	Notes
	Breakdown event segments for budget allocation	Brittanie & John	Ingnorantd
	Reach out to teams to gauge interest	Marco	He likes to talk to people, and is well spoken when required
	Contact speedway about hosting	Brittanie	bra
	Choose track layouts	Josh B & Mihi	Idk they drive, bray races this track all the time
	Design & create trophies (also do the ones for Invitational)	Ghram	Lol
	Create day-of schedule	Brittanie & John	People do not understand the detail required in this
	Determine scoring criteria	Josh Morrison	Numbers = Morrison
	Document tech inspection standards	Heily or Josh Morrison	Ecar- bailey & mathew. Ingnarious do normal
August			
	Dry-run track layouts if possible	Mihi & Heily	Yes for planing of getting car out there
	Confirm facility & plan how to mark off areas/direct people	Ghram	He do da maps
	Create Save the Date & send to both sponsors and participants	Steven	Lol its steven
	Provide scoring criteria & document tech inspection standards	John W/ Ingnarionus	yep
	Create sign-up & send out official invitations (to both sponsors	Steven	He communacate well

Set deadlines and meet up with partners by end of next week
Keep in mind major deadlines (bold and highlighted)

Hello from KSU and Clemson University,

As promised, below is the final details for the Barnesville Shootout 2022.

Tech Standards & Event Scoring
The tech inspection documents for IC and EV are attached. Green highlighted items will be checked with no compromise. Yellow highlighted items will be checked as the inspector deems necessary. For event scoring, the fastest timed lap wins.

Registration
The registration cost breakdown is below. After you register with the link below, a PayPal invoice will be sent to your team email. If an alternative payment method is required for your specific circumstances, please reach out to us. Pit Passes will be paid upon arrival.

To officially RSVP, please fill out this form.

Team Registration: $175 per team
Pit Pass: $6 per attendee

Event Details & RSVP
Please see the attached daily itinerary.

Event Date: October 14th-15th
Location: Georgia Sprint Karting Association
Lamar County Speedway
964 GA-36, Barnesville, GA 30204

Final Notes

- Each attendee will need to sign a waiver upon arrival for the track's insurance purposes.
- Bring your own transponders, generators, and charge carts.
- Camping is allowed at the track. Please come prepared with your own supplies as needed.
- Bathrooms and showers are available for our use. Please remember to respect GSKA's property and facilities.

Sincerely,
KSU & Clemson University

	and participants)		
	Confirm budget amounts	Steven	He knows this
September			
	Have teams confirm attendance	Brittanie	
	Ensure we have a way to post results & announce each event	Andrew	He do da social
	Create list of day-of roles & assign to teammates	Brittanie	bruv
	Tech Inspectors	John	bruv
	Track Crew	Cade & Graham	The can subress the acute lack of smart disison about track workers
	Parking Guides		
	Setup/Takedown Teams	Marco	He is good at direction
October	***Tentative Event Dates Oct. 15th or Nov. 5th***		
	Gather & consolidate items for setup/takedown		
	Confirm estimated attendance to facility and food vendor as appropriate	Brittanie	
	Document spectator instructions & share with teams	Josh & andrew	They understand events enough and are good at listing it out
	Event details packet to sponsors & participants	Steven & Marco	They do the communacate well
	Create list of key points to be announced throughout		

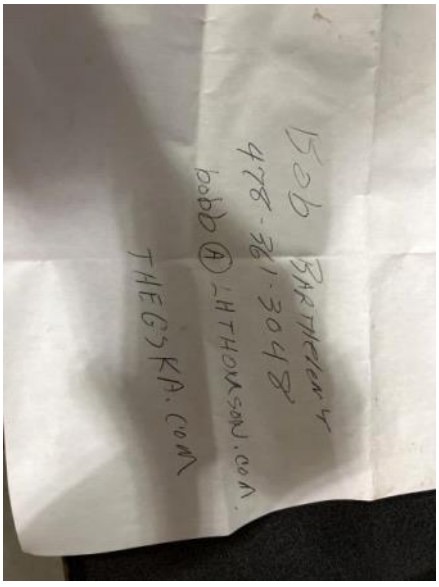
	event		
November			
	Post-event marketing		
	Event summary to school & sponsors	Brittanie	I do not want to do this

Lamar County Speedway

Thursday, July 21, 2022 12:29 PM

Lamar County Speedway
(678) 359-4222
964 GA-36, Barnesville, GA 30204

Bob Barthelemy
478-361-3048
bobb@lhthomson.com
thegska.com

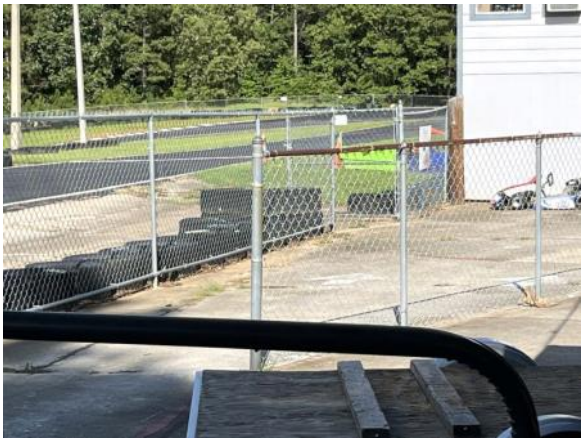


Track Visit 7/16: John getting phone numbers for good contacts and pics of facility

Questions:

- What is your racing schedule?
- What are track rental rates?
  - What would it cost to run events between races during the season?
  - Can we rent the whole track after the end of the season?
  - Is insurance required?
- Over what timeframe do we have access to the facilities?
  - Friday-Saturday preferred
- May have some electric cars running. Is there a covered area where we can charge these batteries if needed? (Teams will bring generators – but might need a backup plan.)
- Are there any barricades or markers available that we can use to "rope off" certain areas (spectators, paddocks, food vendors, sponsor booths, etc.)?
- Is the speedway ok with us posting pictures from the event on our website and social media?

Would like to send a follow up email to confirm discussed details.
Confirm: $850 for the track for the day; $1,200 if we want them to "do all" and rent transponders (don't need to use theirs)



On Track Rules

Presidential Election

Wednesday, June 7, 2023 9:28 PM

Presidential Election Notes 2021-2022

Tuesday, July 06, 2021 9:22 PM

- CANDIDATES:
  - Bj
    - Sustainability
    - Comms
      - Keep FB messenger, create new subgroup chats and call old ones legacy
      - More focused comms w/ active only groups
      - Need mindset change
    - Retention
      - After comp mods
      - See new members do fun things, not necessarily comp legal
    - Scope
      - No more mfg time or eng time, only leading others in doing
    - Ecar
      - Concerns on knowledge base
      - Prioritize buying components before designing and making our own
      - More people recruited for ecar
    - $
      - Not good idea to prioritize ecar, shouldn't delegate more than half of budget
    - Beat clemson
      - Infrastructure issues – shop organization, keep consistently clean shop
      - Reliabiltiy – Having backup was good, but should've redesigned intake or tracked down issue (for example)
      - Topdown reliability review
    - Why
      - Controversial things fall on your shoulders
    - Social media
      - Shop cleanliness, race-ready cars
      - Keeping car done, keep taking pics
    - Where we go
      - Look at avg times of other new EV teams to get through tech before deciding
      - Take what we have in August and ask if we can race in the summer
    - Replacement
      - Hoping for it to be more than just one
      - Replace mfg lead with a decentralized group
      - Work on physical training documentation/SOPs
      - Make docs that include what everyone should know
    - 2E before 6C
      - Can't assign priority on the fly
      - If we decide 2E is going to comp then it takes priority, but otherwise they need to run in parallel
    - Cost and business
      - Either way, getting cost done early is a good idea
      - Easy to lose parts with hasty cars, so be meticulous
      - Finish cost ahead of time
      - For business, need people focused on it
      - Put more time into it
    - VP
      - Somebody who complements personality and areas of weakness
    - Alumni
      - Alum events
      - Parties
      - Keep Messenger
    - Overload
      - Prioritize tasks, with communication being first priority
      - Individual followups first to go
      - Focus on team and subgroups to take what you can't handle
    - Challenge

Saybac
Game night
Reimbursments
RSO regrestration
School events
Manage bank &parypal
Room RSO meetings

        - Time management
        - For team, expecting more effort out of everyone
        - Motivation
    - Gokarts
        - Didn't like original scale of gokarts, would like to find project w/I budget that still benefits us if they leave
        - One or two, electric and use ecar components/logic
        - Mods to project car/raptor, advance with new people
        - Time cost of old project was too much, people that stuck around had jobs during and after
    - Newbie retention
        - Filter new people, think we should look at resume and interviews, actual acceptance process
        - Shouldn't try and train new people
        - Filter out people worth our time
        - Have more focused group get focused projects
        - Don't try to make something easy
    - Notebook
        - Leads good idea but the context of fsae doesn't require it the way govt contracts do
    - Applications
        - Take resumes and applications, ask specific questions (staying more than a year, transferring to tech, etc) and interview them in groups
    - Biggest issue
        - Shop organization and cleanliness
        - Lack of infrastructure for more people in shop
        - Lack of skilled members, attract by having presentable shop
    - Legacy
        - Focus on sustainability
        - Make sure next president and next team is still viable

- Cade
    - Co-lead structure
    - Comms
        - Not good comms transparency, need more structure
        - Platform doesn't matter, it's more an attitude
    - Retention
        - Have scheduled work shifts and an actual schedule
        - Have active things for people to work on
        - Have basic projects for new people tow ork on
    - Scope
        - Would prefer to not be both end and prez but would train people
    - Ecar
        - Split in team is an issue, requires two different skillsets that need to be brought together
        - Member training
    - $
        - Fund depend on necessity
    - Beat Clemson
        - More mock competition events
    - Why
        - Don’t want someone who will waste time
        - Running because those things need to be fixed
        - President defines priority
    - Social
        - Post more
        - Progress pics/videos, should be able to see team progress through SM
        - Might be good for recruiting
        - Business lead or someone have as dedicated job
    - Where we go (sae)
        - Decide in august, so we need to know before august what we actually do
        - Plan for it
    - Replacement

        - None available right now who isn't already busy
        - Co-lead structure, be facilitator for people working on E&D
        - Biggest knowledge gap is tuning
    - 2E before 6C
        - Just because 2E is behind doesn't mean we should hold back 6C
        - 2E can't hold back combustion program
    - Cost and business
        - Need actual business/logistics department
    - VP
        - Keep track of shit
        - Dates and deadlines
    - Alumni
        - Alumni days
        - Messenger DMs
        - Document what the alums actually did
    - Overload
        - Look at what's on plate, find someone to take e&d lead or make punchlist and go MIA (worst scenario)
    - Ordering/sourcing
        - Duty belongs to the engineer designing part
    - Challenge
        - HR problems
    - Gokarts
        - Good way to get people plugged in
    - Newbie retention
        - Should go from karts to something else, need to have plan to keep them doing things
        - Implement more specific subgroup aspects into the training
        - Teach critical skills in-application from beginning
    - Engineering notebook
        - Leads keep notebook for their subgroup, not everyone
    - Applications
        - Need to thoroughly develop way of filtering without hard turning them away, because that eliminates people with potential
        - Have unfiltered application to see what interests there are, make a list of people suited to each subgroup and the lead could go and reach out individually to them
    - Biggest issue
        - Car needs to be ready for comp no matter what
        - Keep car rules legal always
    - Legacy
        - Dragged into it, but cared about the team

- Garwacke
    - Recruitment focus
    - Comms
        - Things get lost in two separate comms platforms, should move entirely to one platform (teams)
        - Full move to Teams, but also Messenger is good for legacy comms and casual chat.
    - Retention
        - Be nicer to new people, create less hostile environment
        - Keep up with people better, esp. Newbies
    - Scope
        - Just a guy being a dude
        - Continue designing parts
    - Ecar
        - Alternate ecar and combustion years, 2 year dev cycles for each car
    - Beat Clemson
        - More legacy outreach

        - Better documentation of previous practices and designs
        - Focus on knowledge transfer
    - Why
        - Culture based change, but prez isn't needed for a lot of them
        - Things that come with the role best way to affect change
    - Social media
        - Plenty of material exists, can use that
        - Hard to show design work early in the year, so instead we could show off newbie projects early on in the season
    - Where we go
        - Ecar primacy
        - Two year development cycle, overlapped
        - Since C won't ever not be operable, then do both this year
    - Replacement
        - Not needing to replace a sg leader
        - CAD workshops
    - Cost and business
        - Get business team people
        - Ask old business leads, reconnect with alums
    - VP
        - Complementary, business team
    - Alumni comms
        - Alumni days
        - Kickoff
        - Ask about old problems
        - Slide into DMs
        - Email
    - Overload
        - Just ask for help
        - Prevention vital
    - Challenges
        - Business duties, responsibility of handling large funds
        - Would look at prior funds and practices
    - Gokarts
        - Good project, got experience out of them
        - Gives freshmen something to do, smart to bring it back
    - Newbie retention
        - In person meetings good, create friendly atmosphere
        - Freshman project(s)
        - Shouldn't expect to retain most of them
        - Easy projects, like manufacturing (cutting gokart frame tubes)
    - Leads keeping notebook
        - Good idea, so that leads don't walk up with very little to say at Monday at the least
    - Applications
        - Would advocate, if not for covid
        - Hurts momentum
        - Return to pre-covid direction, free process for a year before implementing a stricter process
        - Duplicate 2yr ago process (jordan's year)
    - Biggest issue
        - Outreach is lacking
        - Kennesaw campus relationship poor
        - Business help
    - Legacy
        -

- Jake
    - "Get our name out there"

- Broad business experience thru internships, general car knowledge
- Comms
  - Whatever works best for people, what comms meshes best
- Recruitment
  - Not micromanaging, each group runs their own planner tasks
  - More team workshops, classes, "internal outreach" - keep us doing things together
- Scope
  - Step down as data acq but only help out
- Ecar
  - Workshops
  - Ask shash wtf he needs, make decisions based on that
- $
  - Subgroup lead budgetizing meetings
  - Project based funding instead of subgroup based
- Beat Clemson
  - Actually work with Clemson
- Why
  - Best way to change direction is to be the one at the steering wheel
- Social
  - Have people with specific social media responsibility
  - Too much for one person, needs to be group effort
- Where we go
  - Time and money constraint, if in theory we had resources to do everything we should go everywhere
  - Start year with project planning meetings, set timelines and etc
- Replacement
  - Avery did a good job
  - Hold workshops to train new people
  - Continue setting standards
- 2E before 6C
  - Iterchangability means consecutive construction not necessary
  - Not my call
  - Do in parallel
- Cost and business
  - Get familiar with process
  - Rebuild business
  - Practice, do presentation dry runs and rehearse
  - Try to bring in professors or industry to judge our presentation
- VP
  - Keep up with dates and deadlines
  - Prez focus more on non-engineering, VP should fit well as liaison role
- Alumni
  - Alumni days
  - Extend more invitations
  - Alum newsletter
- Overload
  - Expect VP to be able to help stay on task
  - Hope people would be willing to lend a hand
  - Keep comms, make sure people know where you are
- Challenge
  - ADHD
  - Forgetting things
- Gokarts
  - Great idea, doesn't have to be gokart
  - Could be geared toward our overall comp goals for that year
- Newbie retention
  - Spend more time on them, especially training
  - Last year we came up with whole plan and covid fucked us
  - Implement plan we came up with two years ago
- Engineering notebook
    - ◇ No
    - ◇ When we do tshirts, buy notebooks to give out

                - ◇ Mandate meeting notes, like bullet points but not everyone
            - Instead of notebook, have requirement of some form of documentation that best suits the lead individually
            - Daily log, but format could wander
    - Applications
        - Willing to filter, but don't want to hard turn people away
        - Go further than current method, people don't always show their potential though
        - Wouldn't ask for resumes, casual talk good
        - Make less restrictive as time goes on, filter the first big bulk first
    - Biggest issue
        - Rules compliance
        - Having 5 as test platform will help
        - Resources an issue, money was a huge holdback
        - Awareness, both companies and students, is holding us back
        - Making up for lack of money is waste of time
    - Legacy
        - Getting out of the slump

- Nathan
    - Retention
    - De-cliqueify
    - Comms
        - Issue – effort of communication/lack thereof, need easier comms
        - More effort of communication
        - Look at other platforms besides Facebook
    - Retention
        - Leads reaching out to new people more, leads responsible for keeping up with people better
        - Leads ask for help from newbies more, it gets people in more
        - Get them actually doing things
    - Scope
        - Keep up with school, sponsors, SAE docs, making sure submissions happen, put in time to do presidential stuff
        - Do composites simultaneously
    - Ecar
        - A lot less people attending ecar design reviews currently
        - Find a way to move ecar duties into traditionally combustion teams, or perform hybrid meetings so people are on the same page
        - Rolling chassis very early, asap, make go faster
        - Do same thing with ks5 and raptor, 2 cars
    - $
        - ?
    - Beat Clemson
        - Focus on getting through tech, to and through endurance
        - Testing time, engineering process
        - Give John the resources to do this
        - Resources! Get more shit and contacts
    - Why
        - Prez role is getting integrated with community
        - Planning trickles down
    - Social media improvements
        - Put stuff on there
        - Stories, pictures, all the time
    - Where we go
        - If we knew last august there'd be LV and Michigan, we'd wanna not take E to LV
        - See if SAE knows their head from their ass first
        - Canada prob not
        - Take most prepared car to Michigan, because biggest stage
    - Replacement
        - Nobody available rn, would be willing to continue composites work

- 2E before 6C
    - Shouldn't hold back 6C because of 2E
    - Only focusing on ecar would be wasting time, because some people wouldn't be able to contribute to 2E project
    - Since major components aren't fabricated yet, there's not a lot of things that everyone can do
- Cost and business
    - Bigger business team
- VP role
    - Assist in communications and paper pushing, order tracking, spending tracking, keeping up with school, printful, website, student advisor contact
    - Partner
- Alumni comms
    - Alum days
    - Have events
- Overload
    - Delegate
    - Slow down on composites, manage time
- Challenge
    - Squeezing out funding
    - Creating new contacts
    - Up business side, including SM, creating new contacts, maintaining existing relationship with school (alumni foundation)
- Gokart
    - Good idea to get new people building things
    - Raptor good for this too
- Newbie retention
    - Emphasize subgroup meetings
    - 1-2 times a week, make sure they're coming in
    - Don't get people stuck in a subgroup, let them wander
    - Weed out who fits in and who doesn't
- Engineering notebook for leads
    - Leads write down tests they do in their own notebook
    - Keep track of successes, failures, information
- Applications
    - Would not do at this point
    - Intimidating
    - Not yet up to the level to do that sort of thing yet
    - Do more on experience basis
- Biggest issue
    - Hold ourselves to the standards of higher teams
    - Shop cleanliness and organization, will directly raise the bar
    - Keep CAD clean
    - Keep cars rules compliant before testing
    - Look at other teams and observe their practices
- Judgement of compliance
    - Focus on the things we're changing, don't reinvent the wheel after comp
- Legacy
    - Become a team that is taken seriously

- Jesse
    - All things should point towards competition achievement
    - Not for personal gain, do it for comp
    - Clean shop
    - Focused workshops
    - Keeping second car going
    - More outreach
    - Comms
        - FB annoying
        - Technical talk needs to happen in Planner/Teams
        - Email main headlines of the week

- Retention
  - Stuff to do for new people – expect them to not know anything, tasks help them learn
  - New member retention starts at subgroup lead level
  - Starts in planner, starts with actual list of tasks
- Scope
  - Keep team alive, funds coming in, car improving, going to more places, good school relationship
  - Holding ballsy standards
  - Keep chief mechanic, but that'd be the first thing to go
- Ecar
  - Workshops
  - Sister car policy, as close to similar as possible
  - Not redesign each year, keep KS3E very similar to KS5C-KS6C process
- $
  - Project proposal budget incorporation, cost
- Beat Clemson
  - Not building a car each year, or redesigning from the ground up
  - Keep iterating
  - Running car rules legal every time it goes out
  - Lots of runtime, more autox, barnes, pitt
- Why
  - Uphold higher standard as prez
- Social
  - SM should be subgroup of business
  - Start with making crew with lead and underlings
  - Kennesaw campus people good for this
- Where we go
  - Need to establish yearly schedule of targets with different events and progress points
  - Should have a meeting early on about this
  - Decide based on what cars need, so should prioritize to what car needs more test time
  - Take car that has best chance of placement, whether that's combustion or electric
- Replacement
  - New role, so team could survive without a CM
  - Would do everything to keep CM position alongside prez
  - Graham good fit for replacement
  - Raptor could be new guy
- KS2E before KS6C
  - Have to decide in August what car goes where, that's the split
  - Do it based on what our goals are
  - Need more dedicated ecar people to get it to catch up
- Cost and business
  - More manpower, more organization
  - Go to business building and put up flyers, recruit them
  - Set business goals
  - Be more prepared for presentations
  - Business should do both ecar and 5, don't split
- VP
  - Most experience with the team in regards to school comms, alums, contacts.
- Alumni comms
  - Somebody that knows alumni, like John McCrary
  - Been on team for a while
  - Alumni days
- Overload
  - Keep core priorities
  - Communication is key
  - Divide and conquer
- Purchasing/sourcing
  - Lot of design involves the sourcing process
- Challenge

        - Making sure higher standard is upheld
        - Making big, high-level decisions and being the final say
    - Gokarts
        - Nothing against em, came on team because of them
    - Newbie retention
        - Have a meeting about it, brainstorm
        - Have an engineering outlet for them and have organization so that leads can appropriately divide work
        - Divide by majors, assign majors to something
        - Monday meetings
        - Planner master race
    - Engineering notebook
        - Agree
        - Implementing huge hurdle
        - Do simple things before enforcing keeping notebook
    - Application process
        - Resume submissions bad idea
        - Need pristine appearance first
        - People at ksu to learn and grow so we shouldn't judge people based on what experience they come to us with
        - Do survey instead of application, google form
    - Biggest issue
        - Biggest next step is competition level, competing better and finishing all events
        - Holding higher standards of rule compliance, testing
    - Legacy
        - Leave with a better system that creates cars more reliable, presentable, stronger

- John
    - Keep template

====
Open forum ideas:
- focus more on teams?

- Member retention a problem, needs a plan

- Recruitment ideas
    - Car show
    - Week of Welcome
    - SOAR Fair
    - Need to expand majors recruited
    - Targeted recruitment
    - High school showcase day
    - Kennesaw campus stuff

- Messenger growing pains

- Focused workshops – continue growing

- Sustainability
- Prez should have broad range of experience
- Communication platform

- Keep up with people in gmail

- High school outreach

- Thursday: moved to 8pm

- Ecar 1 continuation
  - Low power drivetrain?
  - Just scrap it?
  - Use raptor to teach circuit design
  - Basic training
  -

Presidential Election Notes 2022-2023

Tuesday, July 19, 2022 12:13 PM

Presidential Election Notes 22-22 Pt 2

Thursday, July 21, 2022 7:02 PM

Electees: Matthew, John, Marco, No pres

Question 1:
Do you think you can successfully mentor Heily, Mihai and Steven
John: Not successful in 2019, 3 people is different, more time to train
Massive role in LV circiuts, how will this affect other role
Matt
Nothing will change on things that can be managed
What will you be pulled away from on other projects
Marco
Pulled into Ev, feel like give you a direction on the team to help out where I can

How long to plan to be on team, any plans to intern before graduation ? Balance work/ school
Marco: Plann on staying on with intern from past summer, has another 4 years of school and plan on being part of team those years.
Been doing for past semester, work is flexible with schedule

Matt: 2 years left in school, in intern, not working fall or spring with time decidated to school. Remainder of year to be on team
Weeks up to comp, priotity is team. Took double leave from work. Team first
John: In talks with lucid, may not be here during spring. If taken would not be here but will be on team. 14 hours and TA for 10, not TA and school hours that semester.
Would be remote, avaible for questions

Important role to keep chief eng in check with pres. How would you do this?
John:
What steven is here for, if see anything to call out would be on him.
Matt:
Not sure to entail, has good faith in chief eng and prog manag. Fond of previous chief eng.
Marco:
Not sure to entail, nothing a discussion cant fix.

How do you plan on improving alumni relations:
Matt:
Internship, working with a lot of alumni, all on great terms, estatic to see him as pres.
John:
Been clear who has stuck around is useful to team who isnt is not, want to see more positive outlook on people leaving. Not pursue alumni outreach on some not useful to the team.
Marco:
Don’t know many, would like to talk to more and reach out. Don’t have bad relation, seeing how they would interact with me

Facutly relations big, how is your relations with them
Matt: Seen dean and coates, not much, need to get to know them, Know EVT.
Marco: Have little to none interaction with faculty, would like to get to know them, set up meetings and know them before major interactions
John: Take steven around and introduce

- EV and IC relationship/ Resource Management, What, if any challenges do you foresee and how would you counter them?

  Matt: Pres specific challenges, Doing part priority, limiting scope, lot of parts interchangable, can only imagine challenges, both cars new, will be tough, nothing I can answer right now

  Marco: Wouldn't have much influence on chief eng or board, managing resouces havent had much experience on team

  John: Withholding IC to build up EV team, resouce management is held to chief eng, reason to have 1 set of chief eng.

  What is 1 road block on the team and how did you solve it?
  Marco: School/work/life balance, less load with work, with year behind his back , more comfortable with managing team.

  John: Realizing when you bit off to much on car design, solved by more experience, see how stuff pans out, seeing and being able to predicit,

  Matt: Watching parts going out of stock, seeing a missed rule, circuits tough

  How would you navigate a situtation like eco car?
  Marco: Not much info on what it was
  Matt: Faculty doesn't know what team is, speak with more school on how to handle the situtation
  John: Would handle same way, Talked to other before meeting about proposal

  What are your plans to organzie the shop and keep it clean?
  Matt: Work with members to improve organization
  John: Did good job when travel, much less in shop, bad for LV, organization is most critical, people assigned to certain areas,
  Marco: More solutions to organization, more space to put tools in, hold each other accountable, helped to clean, improve systems

  How clean is your personal room/ living area, car
  John: Depends on task, not stop to clean on time critical, be show ready
  Matt: Bit messy
  Marco: Room cleaned this morning, made bed, keep car decently clean

  If not elected what will you do
  John: look identical, helping steven run for president. If not win
  Matt: Working on both cars, wiring, circuits, projects on priotiy list, teaching new members, duties as low voltage lead
  Marco: Still intrerested on electial projects, reached out to bussiness and helping out there

  With what you would be doing if not pres, is that more important than being pres
  John: Value to independence, but being there to help the team
  Matt: Usually one guy does all on wiring/ LV, a lot can be copy paste, LV is luxry but not nessacery
  Marco: Would shift focus on team, would be better benefit as president

  What approch would you take to diversify the teams

Matt; bring women to events use women to get women hide from cade
Marco: More outreach with school, be open to new people, take time to get more girls, being more open
John: Nothing different, retention problem, solve fundmental problem of getting people in Reaching out when people fall off, engineering, not change fundmentally to go after genders

Member Rentention:
John: Found people feel cant fit in, fix in training, not taking on himself
Matt: Talking with hard concepts, making sure to have simple hand on projects, interpersonal side, for subgroups to check in with new members, getting info
Marco: be a face for the new students, get new people to know him, connect to newbs, finding their way to the team.

Intro elgibity
Matt: Keep rules test on hand, not sure to handle setting the bar for applications could help or not, discuss with board, has some ideas
Marco: Rules test good, first meeting didn't understand about team. Important for rules test and what team is about. How to be part of team by asking.
John: Up barrier entry, application can be done correctly but not implemted till ready More up front with what is required. Make rules mandortory, problem with tossing peopl in deep end. After trainings, there should be second step on how serious they are for team and how much they can put in

How to help the rest of the team to grow leaders
John: by having support system, not reasonable to do every event, not difficult to visit other schools
Matt: Support and encourage others, taking risk to step up, Discuss ideas don't seem too hard
Marco: Buddy system, having someone already on team to help show the ropes of the team. Rotations with different buddies. Showing newbs what is available to them

What would cause you to fail as your role as pres
Matt: losing patience with people. Challenge with newbies, lots of dummies, think can handle with teammates and board members
Marco: Inexperience. First year part of team, willing to put in time. With pres before me to help give experience to fill the role.
John: Having steven not to take role over

What would be success?
John: Steven to be pres
Marco: Want to help team, do more
Matt: Helping my teammates

What does being the face of the team look like to you? What is the biggest challenge with that?
John: Be handing it off, attitude kept people from team, building up steven from get go
Matt: Person faculty coming to for team, being professional, being face to new guys, being friendly. No challenges with faculty, keeping up standard held, If see potential, bring towards team, not if threatening to team
Marco: Setting culture to team and showing to new members and school, ensure that the first culture introduced is what the new members will see

Wil you leave current board position for pres
Matt: No
John: no

Marco: N/A

How do you plan to help out the chief eng and the goals they set out
Matt:First to do LV part
John: Faculty don't stand in their way, deadlilnes looked and check calendar, card access, ensure const. doesn't interfere
Marco: Team decisions, figiuring what they need help with for people and managing deadlines

Would being Pres cause bias to Groups
Matt: no, find what people want to do then point them to that
John: Done best to fill subgroup as needed
Marco: talk with chief eng, market positions when they open up for the better of the goals

Do you think power of pres is overreached?
Matt: To be evaluated with other board members
John: credit for 2/3 for chief eng, same for pres, if see reasons to add throughout year then add
Marco: Something that should be considered, if powershift, should be discussed.

Why do you feel that you should be president as to there not being a pres
John: breakup of items better and more efficent with one person, better to handle unforseen problems. Items popping up that is not under someone, IE filler. Someone has to deal with lawsuit
Matt: Need to be a guy to hold accountable and hold others also. Unforseen, more to pres than all the bullets in list.

Is your attitude a benefit or detrimite to the team
John: believe to be a benefit
Matt: People left were not worth having around, and did drive people away
Marco: Agree

How to solve online doc mess
Matt: Converging 5 and EV to same teams, resource is useful to team, no prob
Marco: Should aim to have a wikipeda, one central location to find documents, Teams current, wiki is archive
John: Merge all the teams, onenotes are good source to look back on, project proposals = good

What legacy do you plan to leave behind?
Matt: Be remebered as good pres, not overstep my bounds, transparaent, documenting, making decisions with others 1st black pres
Marco: someone willing to help out, to stand up, to sacrifice to help out the team. To be a team that is there for each other
John: stability and effectiveness

If problems arise between members on team, how do you plan to fix
John: sit them down like childeren and find root of problem
Matt: problem solve, squash
Marco: don't take sides

How will you show the members of the team you are backing them up
Marco: See what goal of team is. Properly addressed
Matt: keep up communication with team, ask question doo you have everything you need, being in shop, seeing everything that is going on
John: No awnser

If you start failing, what will you do to help
Matt: ask people to help where behind, ask board
Marco: Talk more with board members, if not being benefical, guaging on how im doing
John: no value in question

If approached if making mistakes, how you would approach the situtation
Matt: Bring in other from the team, take it and accept what they say
Marco: Ask if is a common issue, ask others of team, is this a priority
John: Bring in others

Whats your stance on chief mechanic?
Matt: Not seen enough to call, disscuss with team and board if to come back, to evualute
Marco: Accountability to person, worth having disscussing if benefical
John: Everything on role def falls on chief eng.

Do you think you are respected by the team depending on that, how does that affect your pres in year
Matt: yes, don't see it will affect.
Marco: like to think is respected, but is least experienced. Want to show capable of role
John: Enough to get the job done

Plan to restore resources to expire
John: work with school for truck, look at people coming in and not rush it, play by ear
Same for both

What is your reasoning for not / is standing up first night
Marco:Want to help out as much as possible for team to help, can be benefical
Matt: Didn't dwell on day of, made decision later
John: Block others from running, ran to stop the cycle of being a non race each year

Who would be VP?
Matt: yet to make decision

2022 Business Presentation

Monday, April 11, 2022 3:31 PM

Resources and Notes --> **(That way)**

2022_FSAE_Business...

Communication and Meeting Notes with Matt Khoury **(Bottom Right)**

FOR COMP FILES GO TO: KSC-C Teams --> Business --> Files -- > 2022 Comp Bis Presentations

2022_FSAE_Busines...

Notes and Helpful Resources

Industry-Wide Electric Push:

https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/why-the-automotive-future-is-electric

- Large portion of the push for EV infrastructure is because of regulation.
- "Governments and cities have introduced regulations and incentives to accelerate the shift to sustainable mobility. Regulators worldwide are defining more stringent emissions targets."
- These incentives are like a leash

Operational Efficiencies:

https://www.integrify.com/operational-efficiency/

- Gives examples and definitions of the key aspects of operational efficiency.
- Identifies crucial areas of a business that can be refined for better effectiveness.
- The bottom of the article links to multiple resources related to operational efficiencies, it's a good idea to skim them.

Labor Force:

- Labor Force Participation rate
- https://www.savion.com/blog/effects-of-low-productivity-business-growth/
- "Non-traditional work spaces run the gamut from standing desks to open concept offices to working from home. They may be colorful spaces with a variety of seating configurations and desk styles. Or they might be fully networked home offices with access to WebEx and conference lines."

Economic Benefits

- Company Profits/Revenue compared to Cost to Make EV
- Resources
- "Summaries"

- Labor change
- Connection between customer and employee based on lesiure and similar interest
- College fund, virtue feel good, competitive opportunities, carrer and training pathways
- Small selective groups, more craftsman like products, more together as a team

With the push to EV, we had to change our marketing strategy both to our customers and employees.

Steven ---------- Push for EV, in worldwide scope and what it means for us.
Marco ---------- Manufacturing OE,
Lauren ---------- Marketing, Overall Economic effects , etc.
Heily ---------- Labor force, Supply chain
Mukund ----------Manufacturing OE,

OUTLINE:

Intro: Introduce the team "Good afternoon, we are Kennesaw Motorsports and we are here to present our business model to you. My name is... (go down the line in presentation order)". Then launch into the slides.

I. Push for EV – Steven – federal and state rebate
   a. Governments are pushing for more EV cars
   b. This provides incentives for businesses to shift their focus from ICE to EV
   c. So how does that affect us?
   d. The shift to EV means that companies need to hire individuals that have experience with EV products. Through FSAE we have that experience and can use our skills to grow their company. This is extremely beneficial for the company itself and the development to their EV program.
   e. How are we taking advantage of that?
      i. Design of the KS1E and the KS2E
      ii. Highlight the similarities between the KS5 and KS2E chassis
      iii. Point out the differences
      iv. Use that to link to operational efficiencies

Resources:
1. https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/why-the-automotive-future-is-electric
2. https://www.consumerreports.org/hybrids-evs/why-electric-cars-may-soon-flood-the-us-market-a6006292674/

II. Operational Efficiencies - Marco
A.
B.
Resources:

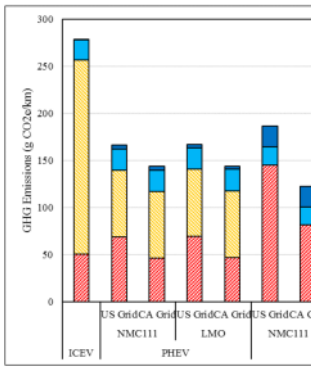
III. Labor force
Divide marketing change between employees and consumers?????????
a. Due to non traditional workspace, allows workers to stay home and work on their cars, relate to consumer
b. College fund, pay off student loans, opportunities and carrier pathways, playing to the empathetic side of the consumer
c. We can spin the limited amount of people at once as a positive. Non traditional workspace, limited people, close team, smaller groups, more like craftsman like product
Resources:

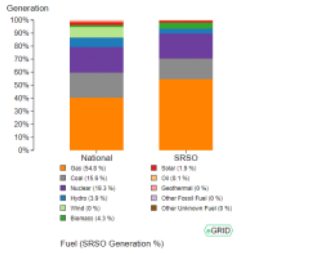
I. Marketing & Economic Effects,
   a. Sjfnsl
   b. Fjsblj
   c. jsnfkjn

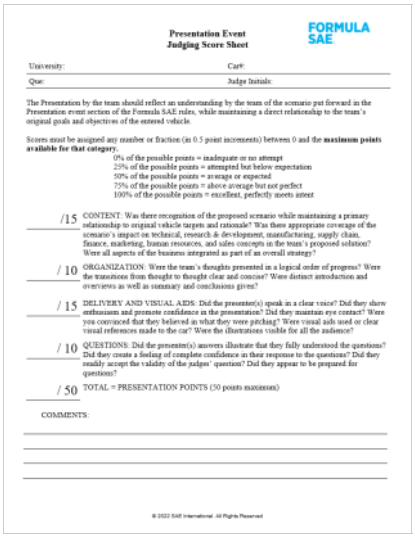
Resources:
GAS VS ELECTRIC - https://avt.inl.gov/sites/default/files/pdf/fsev/compare.pdf
Successful Strategies - https://www.linkedin.com/pulse/20140731203820-41400023-5-winning-strategies-for-marketing-and-selling-electric-vehicles/
Fuel Data- https://afdc.energy.gov/laws/search
Global Market- https://electrek.co/2022/02/02/global-market-share-of-electric-cars-more-than-doubled-2021/

V.
A.
B.
Resources:

Conclusion: "Thank you for listening to our presentation , are there any points that you would like clarified or expanded?"







Presentation Event
Judging Score Sheet

FORMULA SAE

University: Car#:

Que: Judge Initials:

The Presentation by the team should reflect an understanding by the team of the scenario put forward in the Presentation event section of the Formula SAE rules, while maintaining a direct relationship to the team's original goals and objectives of the entered vehicle.

Scores must be assigned any number or fraction (in 0.5 point increments) between 0 and the **maximum points available for that category.**

0% of the possible points = inadequate or no attempt
25% of the possible points = attempted but below expectation
50% of the possible points = average or expected
75% of the possible points = above average but not perfect
100% of the possible points = excellent, perfectly meets intent

/15 CONTENT: Was there recognition of the proposed scenario while maintaining a primary relationship to original vehicle targets and rationale? Was there appropriate coverage of the scenario's impact on technical, research & development, manufacturing, supply chain, finance, marketing, human resources, and sales concepts in the team's proposed solution? Were all aspects of the business integrated as part of an overall strategy?

/ 10 ORGANIZATION: Were the team's thoughts presented in a logical order of progress? Were the transitions from thought to thought clear and concise? Were distinct introductions and overviews as well as summary and conclusions given?

/ 15 DELIVERY AND VISUAL AIDS: Did the presenter(s) speak in a clear voice? Did they show enthusiasm and promote confidence in the presentation? Did they maintain eye contact? Were you convinced that they believed in what they were pitching? Were visual aids used or clear visual references made to the car? Were the illustrations visible for all the audience?

/ 10 QUESTIONS: Did the presenter(s) answers illustrate that they fully understood the questions? Did they create a feeling of complete confidence in their response to the questions? Did they readily accept the validity of the judges' question? Did they appear to be prepared for questions?

/ 50 TOTAL = PRESENTATION POINTS (50 points maximum)

COMMENTS:

© 2022 SAE International. All Rights Reserved

RECAP W. @BOARDMEMBERS

-Think of it has mass production
  -MAIN HOURS VS CAR PRODUCED
  -COST TO REMAKE CARS EFFICIENTLY
-POM(?)
-Shift virtual to in-person
  -meeting improvement
  -production improvement by felixible meeting methods
-Turnover rate
  -NO ONE REALLY LEAVING
  -PUMPING IN GRADS
  -BROADED SPECTRUM
    -IN TECHNOLOGY, COMBUS VS EV, TRAINING
    -Offer merits,; Robert Glenn Allan- student who pocesses leader quality
      -TEAM MEMBERS are auto-allocated into the chance to win scholarship
-weekly cookout, weekly driver days, free training
-resume building, networking, professional skills development

Why is IC companies still running??
-cost of manufactering compared to manufactories EV cars
-draw dot io

3 changes

Electric push

Operational efficiencies

Labor force

To address:

2022_FSAE_Business...

2022_FSAE_Business...

Email Chain with Matt Khoury:

04-22-2022
Dear Mr. Khoury,

I hope this email finds you well. My name is Steven Tubbs, and I am a member of the FSAE Motorsports team here on the Marietta Campus. I approached you earlier today asking for more information about the review process for competition-style presentations. I am part of the group presenting our official business presentation and was wondering what or who would be available to give us feedback on our presentation. Any advice or direction to other campus services that would be of interest would be greatly appreciated. We are trying to lay the foundations for future presentations by collecting resources and identifying school programs to help forge a strong presentation team going forward. We believe this is important for advancing our team's competitive ability and strengthening our public image. Thanks again for the assistance!

Sincerely,
Steven Tubbs
001020922

04-25-2022
Good morning, Steven!
I took a peek at your schedule and tried to compare it to mine and my colleague's.
Looks like it may be tricky, since your classes are in Kennesaw.
Would you be able to come back down to Marietta and meet around noon or 12:30 tomorrow?
--Matt

04-25-2022
Dear Mr. Khoury,

Thank you so much for your time! I will be back at the Marietta campus by 11:30am tomorrow. My 2:00pm chemistry lab finished up last week so my afternoon on Tuesdays are mostly free now. I am available from 11:30 forwards, whenever you feel is best. I have attached the prompt and grading rubric for the presentation to this email. If you have any questions or need any other resources or information from us, please feel free to reach out to me. Once again thank you so much for your time. Please extend my gratitude to your colleague as well.

Sincerely,
Steven Tubbs
001020922

04-25-2022
Hi, Steven,
Let's get together tomorrow at 2 in the Student Affairs conference room (Wilson Student Center 130). I'll be there along with two of my fabulous colleagues from leadership development, Judy Craven (Director of Leadership Development) and Jessica McLeod (Program Coordinator for Leadership Development).
Please let me know if you have any questions. See you then.
--Matt

04-26-2022
Dear Mr. Khoury,

I hope this email finds you well. Regarding our presentation later this afternoon, our focus is trying to refine our body language, presentation skills, and public speaking as our presentation content is still fluid. Solidifying our appearance and receiving feedback from you and your colleagues will be of great help to our team in the long run. Thank you again for taking the time to assist us!

Sincerely,
Steven Tubbs
001020922

04-26-2022
Good morning, Steven,
Thank you for the information! We'll make sure to take that into consideration this afternoon so we can give you feedback that hopefully will be useful.
See you at 2!
--Matt

Marcos Notes From meeting with Matt

- Must work on a better intro with good flow
- Have a solid outline
- Beginning- What are we going to be talking about
- Middle- Meat and potatoes of our subject matter
- End- Solid conclusion
- Have Learning outcomes
- What are the main points of this presentation?

Should have 6 slides
Create an Outline

Title- Basic Pic info of team
Intro- Context about what we are going to do /Learning outcomes
3- Labor Force
4- Operational Efficiencies
5- Countering EV
Conclusion

Define Acronyms

Change need to require

Relate to matching strategies

Have a good conclusion

Presentation Notes
- Slow down talking
- Work on transitions
- Work on intentionality
- Work on staging
- Make Key driving points
- Talk about Team Specialty

Notes from Jon

As a business we strive to appear climate positive in our focus while remaining efficient producers and being a dependable company for our consumers

Focus mpre on student loan forgivness and how this impacts employees

Steven's Notes from Meeting with Matt:

1. Introductions
   a. More detail, not just names
   b. Announce specialties
2. Structure
   a. Better flow needed
   b. Intro --> "learning outcomes" --> main points --> conclusion
   c. Acronym into slide???
   d. Transitions are a godsend
   e. Keep formatting uniform across all documents
   f. Our main points need to state the problem/issue then immediately follow with a solution
   g. If there is a graph or aid we need to state why we have it
   h. Hooks are a way to grab your audience's attention and pull at their brain.
   i. Designated "MC" for introduction/timekeeping
3. Needs
   a. Need an outline that describes who does what
   b. Need to relate back to "Marketing Strategies"
   c. Take it slow, don't rush. Speak clear and concise. Call for backup if you need it.
   d. Rehearsal
   e. Use facts as a launchpad to other topics (relate it back to the prompt)
   f. Exude confidence
   g. Grab the panel by the balls and pull hard
   h. Practice, Practice, PRACTICE
4. Tactics
   a. Jump-ins save lives
   b. Bring the audience into the conversation
   c. Proofread and prettify everything
   d. Look at Q&A as an improv act, but try to guide the judges into asking the questions you want them too.
   e. If you are uncertain of information cover all the bases by saying "to the best of my knowledge..."
   f. Stay mobile, no hands in pockets. Move if you need to. Be personable.
5. Stuff Done Right
   a. Global context was a really good move, we related to the aftermath of COVID -19 and how it affected the global economy down to individual businesses.

Revised Outline:

Intro:

1. Greeting statement (Hook:: ATTENTION!!)
2. Introduce ourselves (Include specialties/majors)
3. State Marketing Strategy (MAIN TARGET POINT TO CIRCLE BACK TOO)
4. State the learning objectives
   a. Labor Force
   b. Operational Efficiencies
   c. Push for EV
5. Transition to Labor Force **(Insert Name Here)**

Labor Force:

1. **Cause**: Pandemic limited traditional work environments
2. **Effect**: Non-traditional work environments took an upwards climb
3. **Solution**: The non-traditional work model allows our employees to spend more time doing what they love (racing). This makes them more efficient and reduces the carbon footprint because of the significant decrease in commuting workers.
4. The products created by these tightknit, specialized groups can be marketed as more craftsman-like products
5. To connect with the customers empathetic side, we can advertise the college scholarship and carrier pathways offered in our company
6. Talk about how college scholarship and carrier pathways help increase worker retention by offering more relatable benefits in a highly volatile labor market
7. *Transition to Operational Efficiencies* **(Insert Name Here)**
8. Use volatility of the labor market to transition to the unstable economy

Operational Efficiencies:

1. **Cause**: Changing, unstable economy
2. **Effect**: less supply, more border and shipping restrictions
3. **Solution**: Establish a strong supply chain and maintain communication with suppliers, manufactures, and other crucial parts of our supply lines.
4. Transition to Push for EV **(Insert Name Here)**

Push Against EV:

1. **Cause**: Evs are caputreing a growing market share.
2. **Effect: IC need to pressure shot term efficiencies**: In response to Electric Powertrains, our product will appeal to the consumer and the benefits associated with the purchase of our vehicles. Providing customers with practical, accessible, and reliable services for their vehicles will keep IC companies such as ourselves competitive to Electric Vehicles. **Figure 3**
With numerous fuel stations and repair shops, the network for manufacturing and supporting the IC industry currently exist. meanwhile, EV lacks the same level of infrastructure. **Figure 2**
Internal Combustion cars release less total carbon emission compared to the EV carbon footprint which increase sustainability while minimizing environmental damage. **Figure 1**

3. Transition to Conclusion **(Insert Name Here)**

1. Cause: IC hold larger market cap
2. Consumers like ease of access/ Convenience
3. Must keep IC Alive

Conclusion:

1. Short summary of content
2. Tie it back into the marketing strategy

Disclaimer:

[[ONLY PRESENTORS CAN EDIT]]:::[[VIEWERS AND REVIEWERS CAN COMMENT]] PLS N THX :)
[[EDITABLE OUTLINE WITH DETAILS]] - Structure follow Revised Outline Above
https://docs.google.com/document/d/1zvBfEGHDM2tSMd7zv4HRoGtamadQSFhv4_Qe4Dbo/edit?usp=sharing

1. Reduced f
   a. Refi
   b. EV
2. More Ma
   a. Mo
   b. Gas
      i.
      ii.
      iii.
3. Support E
   a. A la
   wor
   driv
   b. The

Team Act

1. Creat
2. After
   prese
3. After
   prese
   your
   via th
   enter

Your
prese

Important

- Make
  exact
- On da
  NOT
- Prese
  pleas
- If you
  colleg
  colleg
- **Test y**
  After

SAE INTERNATIONAL

FORMULA SAE

BUSINESS PRESENTATION CONCEPT

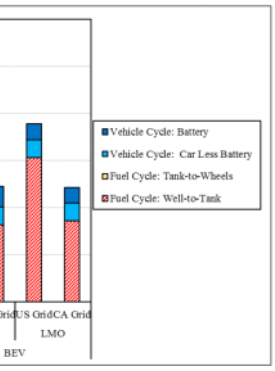
February 8, 2022

EXECUTIVE SUMMARY

Due to continued operations during COVID-19, the business presentation event will be hosted virtually in 2022.

For the 2022 competition, all teams will participate in an initial round of judging taking place in a virtual format using SAE's platform called Hopin. Select top teams will then be notified to compete in a final round onsite in person at the team's registered competition.

Teams will be supplied with a static schedule at least one month prior to the virtual presentation dates of each specific competition. Teams will be assigned a date to present based on their registered competition. Presentation Finalists will be announced within a few days of each assigned date. Teams then will present onsite at competition



Production Emissions
r to graph that compares EV to IC carbon emissions
roduction lines dump approx. 3x CO2 compared to iC lines during production
ufacturing and Support Infrastructure
e factories, gas stations, and repair shops for IC
Stations vs Charging Stations
Charging Stations are being placed for commuter accessibility there is no long distance options available. **RANGE ANXIETY**
Gas Stations are quick and easy, also support convenience store market
Charging stations take time, **time : cost ratio (inverse relationship)**
sential Jobs
ge portion of the populace is involved in some aspect of IC vehicles. They can be in the force like mechanics, engineers, and factory workers. Or just a normal consumer
ing their gas vehicle to work.
workforce requiring long driving and shot turnaround time out vehicles fit best.

ion Items – Please Complete ASAP:

e an account at https://hopin.com/

creating your account, navigate to https://hopin.com/events/fsae-may-business-ntation and register for the event. You will select the 'Student Presenter' ticket.

you've registered above appropriately, you should be able to access your ntation Friday by copy/pasting the unique link below (yellow highlight) into rowser after logging into your Hopin account. YOU MUST enter the session s link and NOT by navigating through the website. You will only be able to your session as a presenter by clicking or copy/pasting the link below:

Team's Link: https://app.hopin.com/events/fsae-may-business-entation/sessions/e64b3c76-08ad-49a0-add3-d8709afa47ee

Notes:

sure when creating your account that you use the same email address and name that your team lead provided in the Presenter Form submission.

y of presentation use the link in Action Items #3 to navigate to the room. DO navigate from within the Hopin site, use the specific link in #3.

ntations will be recorded and shared with your team after upon request, so r do not share your link with anyone.

are running into any issues, please email us at gatecompetitions@sae.org. Day of issue can also be routed to gatecompetitions@sae.org.

our local setup with the Hopin Pre-Event Check
ou've created your account & registered for the event, visit this link here.

EXECUTIVE SUMMARY

Due to continued operations during COVID-19, the business presentation event will be hosted virtually in 2022.

For the 2022 competition, all teams will participate in an initial round of judging taking place in a virtual format using SAE's platform called Hopin. Select top teams will then be notified to compete in a final round onsite in person at the team's registered competition.

Teams will be supplied with a static schedule at least one month prior to the virtual presentation dates of each specific competition. Teams will be assigned a date to present based on their registered competition. Presentation Finalists will be announced within a few days of each assigned date. Teams then will present onsite at competition as part of the finals. An assigned schedule will be released closer to the in-person competition.

The virtual presentation event dates which will be as follows:

May competition - April 28, 2022
June competition - May 6, 2022

The event will operate between hours of 11:00 AM and 5:00 PM Eastern Time.

SAE staff will require action from student presenters to affiliate all student presenters with assigned time slots. SAE will push communication out at those times using the Formula SAE App and fsaeonline.com newsfeed.

Note: For this year, the IC and EV classes will have their own business concept to develop and present to judges.

INTERNAL COMBUSTION

2022 Business Presentation Concept

As the General Manager of <insert company name here>, you and your team of executives are required to present to the board of directors annual meeting how the company's marketing strategy has changed with the industry-wide push to electric powertrain, operational efficiencies, and labor force updates.

The operational efficiencies section should address upstream cost increases, labor hours per vehicle produced, supply chain road bumps over the last year, and any other notable items. The labor force update must contain information on how the non-traditional workplaces has impacted productivity, how the turnover rate has changed from years past, and staying competitive to new and current employees.

Reminders/Notes:

- Teams will be assigned 30-minute appointments.
- Time limit for the presentation remains 10 minutes to present.
- All presenters must be introduced at start of presentation.
- There is NO SUBMISSION for the 2022 competition season.
- All teams must participate in virtual presentation to be considered eligible for in-person competition.

ELECTRIC

2022 Business Presentation Concept

As the General Manager of <insert company name here>, you and your team of executives are required to present to the board of directors annual meeting how the company has addressed the roadblocks related to the supply chain of EV specific components, charger infrastructure, and provide an update on the labor force. What supply chain issues has the company been forced to handle with developing new suppliers, sources, and shipping requirements/regulations?

Explain and justify the company's plan for a charger infrastructure. The labor force update must contain information on how the non-traditional workplaces have impacted productivity, how the turnover rate has changed from years past, and staying competitive to new and current employees.

Reminders/Notes:

- Teams will be assigned 30-minute appointments.
- Time limit for the presentation remains 10 minutes to present.
- All presenters must be introduced at start of presentation.
- There is NO SUBMISSION for the 2022 competition season.
- All teams must participate in virtual presentation to be considered eligible for in-person competition.

https://afdc.energy.gov/vehicles/electric_emissions.html

04-26-2022
Good morning, Steven,
Thank you for the information! We'll make sure to take that into consideration this afternoon so we can give you feedback that hopefully will be useful.
See you at 2!
--Matt

Outline:

Intro:

Strategy: Support Secure Sustainable

1. Greeting statement (Hook:: ATTENTION!!)
2. Introduce ourselves (include specialties/majors)
3. State Main points of addressing road blocks (MAIN TARGET POINT TO CIRCLE BACK TOO)
4. State the learning objectives
   a. Labor Force
   b. Supply Chain changes
   c. Charger Infrastructure
5. Transition to Labor Force **(Insert Name Here)**

Labor Force:

1. **Cause:** Pandemic limited traditional work environments
2. **Effect**: Non-traditional work environments took an upwards climb
3. **Solution**: The non-traditional work model allows our employees to spend more time doing what they love (racing). This makes them more efficient and reduces the carbon footprint because of the significant decrease in commuting workers.
4. The products created by these tightknit, specialized groups can be marketed as more craftsman-like products
5. To connect with the customers empathetic side, we can advertise the college scholarship and carrier pathways offered in our company
6. Talk about how college scholarship and carrier pathways help increase worker retention by offering more relatable benefits in a highly volatile labor market
7. Use volatility of the labor market to transition to the unstable economy and supply chain
8. **Needs:** Labor hours per vehicle (2500hrs?), update the tenure

   Ladder incentive pathway enourages employee development and growth increasing employee tenure

   B66y using this method we can keep our market charged with our vehicles
   To keep our vehicles on road we have a robust plan for Charger infrastructure

Supply chain changes

1. **Cause:**
2. **Effect:**
3. **Solution:** Average shipping delay, Time till empty
4. **Needs:** Identify Tier 1 and Tier 2, Shortages of chips and raw production materials (silicon), supply delay, adapting designs based on stock parts, Variability in shipping lead times (Cannot do same day shipping and cannot predict specific arrival dates)

Charger Infrastructure

1. **Cause:**
2. **Effect:**
3. **Solution:**
4. **Needs:** Piggyback mode, Charging at home (Make it fancy!)

Conclusion:

1. Short summary of content
2. Tie it back to change in supply strategy

Disclaimer:
[[ONLY PRESENTORS CAN EDIT]]::[[VIEWERS AND REVIEWERS CAN COMMENT]] PLS N THX :)
[[EDITABLE OUTLINE WITH DETAILS]] - Structure follow Revised Outline Above
https://docs.google.com/document/d/12yBRFQHDM2rSMo07ay4HRoGtarnaddS5Fhy4_Dx4Dbo/edit?usp=sharing

Lengthy answers
Have better transitions

5. Stuff Done Right
   a. Global context was a really good move, we related to the aftermath of COVID -19 and how it affected the global economy down to individual businesses.

Electric Bois

- We can use similar notes for labor force as it is the same.
- The charger infrastructure seems like charge points and tesla stations type deal. We can look into their strategy for how they expanded. Or we could also just say, since we are not the size of tesla, we will just adapt our charger to be compatible with ChargePoint etc. Talk about average spread and how it will work with the mileage we have.
- Supply chain issues not about ordering things. But because of the shortages in the market, how we keep a secure supply chain through diversification and contracts etc. Chip shortage, battery supply problems.
- We must remember to summarize THE ACTUAL PRODUCT this time

Hello,

This is a reminder to copy and paste the link below to join your presentation today at 1:30 PM EST.
https://app.hopin.com/events/fsae-june-business-presentation/sessions/338394e3-d077-4c38-94a5-544eb35e7555

Thank you

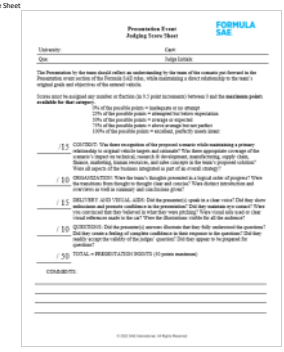
Scott Schultz | University Program Support
SAE International
m +1.412.389.2321
SAE.org | facebook | instagram | linkedin | twitter

Our SAE University Programs move participants, sponsors, and the mobility industry forward.
ARE YOU UP TO THE CHALLENGE?

2023 Business presentation

Wednesday, March 8, 2023 7:08 PM

Score Sheet



Presentation Event
Judging Score Sheet

FORMULA SAE

University: Cars:

Date: Judge Initials:

The Presentation is the team-directed effort to understanding by the team of the scenario put forward in the Presentation event section of the Formula SAE rules, while maintaining a direct relationship to the team's original goals and objectives of the entered vehicle.

Scores must be assigned any number or fraction (to 0.5 point increments) between 0 and the maximum points available for that category:

0% of the possible points = inadequate or no attempt
25% of the possible points = attempted but below expectations
50% of the possible points = passage is expected
75% of the possible points = above average but not perfect
100% of the possible points = excellent, perfectly meets intent

/15 CONTENT: Was there recognition of the proposed scenario while maintaining a primary relationship to original vehicle targets and rationale? Was there appropriate coverage of the scenario's impact on technical, research & development, manufacturing, supply chain, marketing, and finance? Was there a clear relationship to the team's original proposed solution? Were all aspects of the business integrated as part of an overall strategy?

/ 10 ORGANIZATION: Were the team's thoughts presented in a logical order of progress? Were the transitions from thought to thought clear and concise? Were distinct introduction and conclusion as well as summary and conclusion given?

/ 15 DELIVERY AND VISUAL AIDS: Did the presenter(s) speak in a clear voice? Did they show enthusiasm and presume confidence in the presentation? Did they maintain eye contact? Were eye contact and they believed in what they were pitching? Were visual aids used or clear visual references made to the car? Were the illustrations visible for all the audience?

/ 10 QUESTIONS: Did the presenter(s) answers illustrate that they fully understood the questions? Did they create a feeling of complete confidence in their response to the questions? Did they readily accept the validity of the judges' questions? Did they appear to be prepared for questions?

/ 50 TOTAL = PRESENTATION POINTS (50 points maximum)

COMMENTS:

© 2022 SAE International. All Rights Reserved.

Intro Idea
Give context by starting with

Niche Racecar manufacturer that produces 1000(insert Random Number here) Cars per year
Show original car that we (Sold)

Show survey of customers that have interest in electric cars
Survey of customer preferences (Torque, Range, Acceleration, Sustainability, Aesthetic)

Conducting Market Research in Racing Groups, Magazines, Events

Projected Sales using current market trends

Average Production cycle of car manufacturer

https://www.caranddriver.com/news/a15350381/how-a-car-is-made-every-step-from-invention-to-launch/

*** I will post my notes from business prez feed back comp 2022

Rules Inquiry
How much context do we need to provide them (Do they know they are our board)

What assumptions can we fall under for our presentation (What is the size of our company)

Meeting with GTMS
How should we approach them about business presentation
What approach did they take?

Business Pres
Last one was Cancer
Graphs are good

Make appendix in presentation to use during Q&A

NOTES:
***** decide on scale and how many cars being produced**

PROMPT: FOR BOTH IC AND EV

COMBUSTION & ELECTRIC CONCEPT:

2023 Business Presentation Concept

Your company's board has voted to take an aggressive approach to develop a vehicle powered by a different power source.

Coming out of a global pandemic, racing car production will shift to respond to significant global supply chain constraints, increased regulatory hurdles and rapid advancements in new technologies. Following the company's deliberate push to stay on the leading edge of propulsion system technology, you (as senior management) are to prepare and present a strategic plan that will implement a new power source, regardless of how new or cutting-edge the current system is.

This strategic plan should take into account global supply chain issues, environmental impacts and sustainability, power source infrastructure developments, talent and labor issues (including remote work), user ease of implementation and safety, and market demand. You are also to develop the time frame for implementation of this strategic plan and all goals contained within it, including justification for whatever timeframe you choose. All these factors should build the business case for how this plan positions the company to maximize future success.

Remote/Virtual:
- Teams will be assigned 30-minute appointments.
- Time limit for the presentation remains 10 minutes to present.
- All presenters must be introduced at start of presentation.
- There is NO SUBMISSION for the 2023 competition season.
- All teams must participate in virtual presentation to be considered eligible for in-person competition.

rfd

SUMMARY OF PROMPT:

- Vehicle powered by a diff source (IC---> EV) (EV--->HC)
- Time: after the pandemic
- Constraints due to pandemic: supply chain restraints, increased regulatory hurdles, rapid advancements in tech
- Senior management and board must present a plan on how they will implement a new power source
- Factors:
  - global supply chain issues
  - environmental impacts/sustainability
  - power source infrastructure development
  - talent/labor issues (including remote work)
  - user ease of implementation/safety
  - market demand
- Develop a time frame for implementation of plan and goals with it (FLOW CHART)
  - Include justification for timeframe picked
- EVERYTHING SHOULD CONNECT WITH ONE ANOTHER (MAKE A FLOW CHART) TO ENSURE SUCCESS

Initial Research Questions:

1. Define target market (Demographics, Psychographics, Behavioral, Geographic)
   a. Who buys race cars? Individuals? Groups? Businesses?
   b. Why do they buy race cars?
   c. What are some pain points they currently have?
   d. What do they like best about the current market options?
   e. How to they respond to change?
   f. General Market Observations
2. Define the current market
   a. How much does the average car cost to produce? What do they sell for?
   b. What kind of race cars are most popular? Why?
   c. Are there geographic "hubs" in racing, race car production, and race car purchasing? If so, what draws people to these hubs?
3. Market trends
   a. What new power source options are being tested currently? What are the pro's and con's to these options? Have they been tried before? Did it work? Why or why not?
   b. What options offer the greatest opportunities for expansion into other markets or iterative technologies?

General Presentation Considerations:

- It's impossible to cover every relevant point in a 10-minute presentation. Keep the presentation concise and lead towards specific questions.
- Build out a robust appendix with supporting data and detailed information that builds upon the story told during the 10-minute presentation portion. Create it to answer questions that the judges may ask and support your answers during the 20-minute Q&A portion of the presentation.
- Graphs need to be easily interpreted.

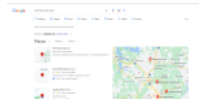
Potential Presentation Flow:

1. Introduction
2. Product Description (highlighting and describing the new technology)
3. Market Description of Target Market and Competitors (Target Market: highlight key consumer characteristics that will drive them towards our product and describe the size of this sector; describe the spread of competitors in the market and foreseen growth for our product in the chosen market segment)
4. Implementation Plan (present SMART goals in year-to-year breakdown, describing how the plan allows for future iterations; highlight factors presented in prompt)
5. Conclusion

Some Items for the Appendix:

- Deep dive into technical specs and pros/cons
- Market data not covered in presentation
- SWOT analysis
- Market Segmentation
- Financial metrics and calculations

Current r
https://lucid.app/lucidchart/560f8869-28eb-413d-9824-f4e2ddfe132a/edit?view_items=LArFQVo_ARuM&invitationId=inv_0efedd05-e45b-43dc-a74c-58a18d2faffa



Environmental Impacts and Sustainability:
The world is changing rapidly, and there is an urgent need to address the environmental impact of our actions. Our company should take a sustainable approach to developing a vehicle powered by a different power source. We should aim to reduce the carbon footprint of the vehicle, minimize waste, and ensure that the materials used in the vehicle's production are environmentally friendly. This will involve conducting a comprehensive environmental impact assessment of the new power source and adopting sustainable practices throughout the production process.

Supply Chain Issues:
The COVID-19 pandemic has highlighted the importance of resilient supply chains. The new power source must be supported by a robust global supply chain that can withstand any disruptions. This will involve diversifying suppliers and reducing reliance on a single source. We should consider sourcing materials locally, and we should also identify alternative suppliers to ensure that we can continue production in the event of a supply chain disruption.

Power Source Infrastructure Developments:
We need to develop a power source infrastructure that will support the vehicle's power source. We should consider developing charging stations, hydrogen refueling stations, or any other infrastructure necessary to support the vehicle's power source.

Talent and Labor Issues:
The company should consider offering remote work opportunities to employees to ensure their safety during the pandemic. Additionally, we need to identify and hire skilled workers with the necessary expertise to develop and produce the vehicle. This may involve re-skilling the existing workforce .

User Ease of Implementation and Safety:
The vehicle's power source should be easy to use, and safety should be a top priority. We should consider usefriendly interfaces and safety features that will protect the driver and passengers. This will involve conducting extensive user testing and ensuring that the new power source meets all safety standards.

Market Demand:
The company should conduct market research to determine the demand for vehicles powered by a different power source and engage with consumers to understand their needs and preferences.
We should also consider the competition and the potential for growth in this market.

Timeframe:
The company should aim to develop and produce a vehicle powered by a different power source within the next 4 years. This timeframe will allow us to overcome any obstacles and position us as leaders in this emerging market.

Based on these factors, I propose the following timeline for the implementation of the new power source:
Year 1: Conduct a comprehensive environmental impact assessment of the new power source and engage with suppliers to diversify the supply chain.
Year 2: Invest in the development of charging or fueling stations and upgrade the power grid to accommodate the new power source.
Year 3: Hire new talent or re-skill the existing workforce to implement the new power source and conduct extensive user testing to ensure user ease of implementation and safety.
Year 4: Launch the new power source in the market and continue to engage with consumers to understand their needs and preferences.
This timeline takes into account the need for extensive research and development, as well as the time required to update our supply chain and infrastructure. Additionally, we believe that this timeline will enable us to carefully evaluate market demand and ensure that we are delivering a vehicle that meets the needs of our customers.

Goals:

1. Develop and produce a vehicle powered by a different power source within the next three years.
2. Minimize the carbon footprint of the vehicle and ensure that the materials used in production are environmentally friendly.
3. Identify and hire skilled workers with the necessary expertise to develop and produce the vehicle.
4. Develop power source infrastructure to support the vehicle's power source.
5. Conduct market research to determine the demand for vehicles powered by a different power source.
6. Ensure that the vehicle's power source is user-friendly and prioritizes safety.

Business Case:
Developing a vehicle powered by a different power source will position the company as a leader in this emerging market. The strategic plan outlined above takes into account global supply chain issues, environmental impacts and sustainability, power source infrastructure developments, talent and labor issues, user ease of implementation and safety, and market demand. The plan provides a timeframe for implementation and outlines goals that will help the company achieve success. By taking an aggressive approach to developing a vehicle powered by a different power source, the company will be able to respond to significant global supply chain constraints, increased regulatory hurdles, and rapid advancements in new technologies. Additionally, the company will be able to reduce its carbon footprint and contribute to a more sustainable future.

v

3/23 Meeting

Thursday, March 23, 2023 6:53 PM

Cool Article related to prompt
https://mobilityforesights.com/product/formula-1-racing-market/

General TO-DO

Recruitment

Media

Future Plans

For Business Pres

Don't use the presentation but have a conversation over the points in the presentation
Show them our old presentation and see if they want to give us feedback

How much liberty do you take in defining your market

- Yes

How do we define what our company uses the car for

-

Is this the vehicle we sell
Or
Do we use our highest tech to roll into other cars

How do they convey their information (Relevant)

On the Flow Chart
Address how we got our target Audience

Use profit from selling racecars to put into production cars?

Focus more on racing technologies

Business to consumer or Business to business ?

What assumptions can we draw?

For IC we are going to EV

For EV we are going to Hydrogen?

Hydrogen Combustion or Hydrogen Fuel Cell?

What other power trains can you use?

Meat and Bones answered in questions? (Appendix)

Presentation Flow?

How Do we highlight the changes

Our audience?(Described in Appendix)

Talk more about our production plans?

Are we starting production soon or are we just starting to transitions

Can we send our judges a pre presentation Handout

4/6 Meeting

Wednesday, April 05, 2023 1:41 PM

To Do:

- Set weekly deadlines
  - Schedule practice sessions
  - IC Presentation 4/27
  - EV Presentation 5/11
- Create PPT template for EV presentation
- Review **IC research** and fill out template with decided items:
  - Choose target market
  - Define product
  - Define company
  - Decide general implementation plan
- Review **EV research** and fill out template with decided items:
  - Choose target market
  - Define product
  - Define company
  - Decide general implementation plan

Meeting Notes:

PPT Drafting: 7th-18th
PPT Finalized: 19th
Presentation Practice: 20th-26th
Practice with School People: 26th
Presentation: April 27th

IC Research Final Decision

Target market:	Consumers/Individuals
Product	RacecarzZzZzZ

4/10 Meeting

Monday, April 10, 2023 5:43 PM

What make us different

How will we sell it

Who are we selling to

Changing perspective, look at long term

For track days, say you partner with SMI, sponsor track days and electrification

Working with SCCA to ensure vehicles are allowed to race in local chapters
SCCA Approval in more places

YEEEEE

- Competitors: Ariel Atom, Radical SR, KTM X-Bow, Caterham
- Changing Perspectives: don't trust technology, speed zoom, ease of use

Feedback and Further Research Items

Product: - What kind of racecar? How will customers use it? (What events will it run? What category will it fit into if racing with say, SCCA?) - Are you offering customization? To what extent?

Implementation: - Cascade plan is internal to the company. It is a great way to make sure every department is contributing effectively to the main goal. You still need an external strategy also. How will you sell it? What are your competitors doing? How are you better than them in your customer's eyes?

"Changing people's perspective of EV" is lofty and generic. What does this mean? Who are these "people"? What is their current perspective? What are you changing it? How does that change of perspective benefit you in the long term?

"Sell EV cars that can compete with IC cars" How does it compete with IC? On the track, in pricing, services, power?

If offering on-track test drives, do you own a track? Is it a partnership with a track?

4/17 Meeting

Sunday, April 16, 2023 3:11 PM

Goals of the meeting:

- Go thru the PowerPoint and discuss what we like, didn't like, and feel is still missing
- Check for flow of the PowerPoint and appendix
- Make a list of items to have by Wed so we are ready to present Thursday
- If not already done, have everyone make talking points for their slides

Feedback and Further Research Items

Product: - What kind of racecar? How will customers use it? (What events will it run? What category will it fit into if racing with say, SCCA?) - Are you offering customization? To what extent?

Implementation: - Cascade plan is internal to the company. It is a great way to make sure every department is contributing effectively to the main goal. You still need an external strategy also. How will you sell it? What are your competitors doing? How are you better than them in your customer's eyes?

What make us different

How will we sell it

Who are we selling to

4/26 Debrief

Wednesday, April 26, 2023 8:14 PM

Dean Case

- What does it cost
- Who is ur competition, what do they cost
- Clarify spec car
- Are we using dealers, how many cars produced, how much cost to produce that many cars
- May be confusing that we are presenting a formula car as an autocross car
- Creates room for disbelief
- Total cost of ownership
- Why buy vehicle? Is there a specific competition to ur product
- Did market tank for race cars? Chips?
- Backlog for gr champ cars
- Make a slide for any question asked
- Cost to cover 32 SCCA events, driving to and at the events
- What is staff chart trying to say
- Private site?
- If finals, take printed of the slides to the comp LOL
- Source at bottom for charts, track correlation between lux consumer car data and race cars
- MX5 cup car is under 300 for 7 years, 1000 cars might be unrealistic
- He would rather lose a couple points to rubric for knowledge and understanding of the market
- More depth of knowledge
- Don't make up data, but if they call u on it then u can at least source to a company
- How many semi-conductors does a race car need
- "let's review the most frequently asked questions"
- North American market or global, check competitors cars
- Cost of a trailer, road legal car?? Fit in truck bed
- Toyota gr86 competitor
- People who have Ferraris but want a disposable car, cheaper to maintain and fix
- Sources for macros appendix slides and price performance comparison
- Implementation plan? Cost of adding the new machinery to make this possible
- Source for appendix slides??
- When does the first revenue come in and when's the burn rate of that
- "Drive to Survive" creates a big interest in the market
- Jim Downing for EV Business?
- Look at Baja presentation if time permits
- Lux and sports car market overlap ;-;
- Autorotative country clubs
- Motozelo in new york, thermol in cali
- Capacity to have wireless chargers at race tracks, and who pays for it
- L Bozo ;-;
- Why should race tracks invest in wireless tech

Seth, Bray, Britt

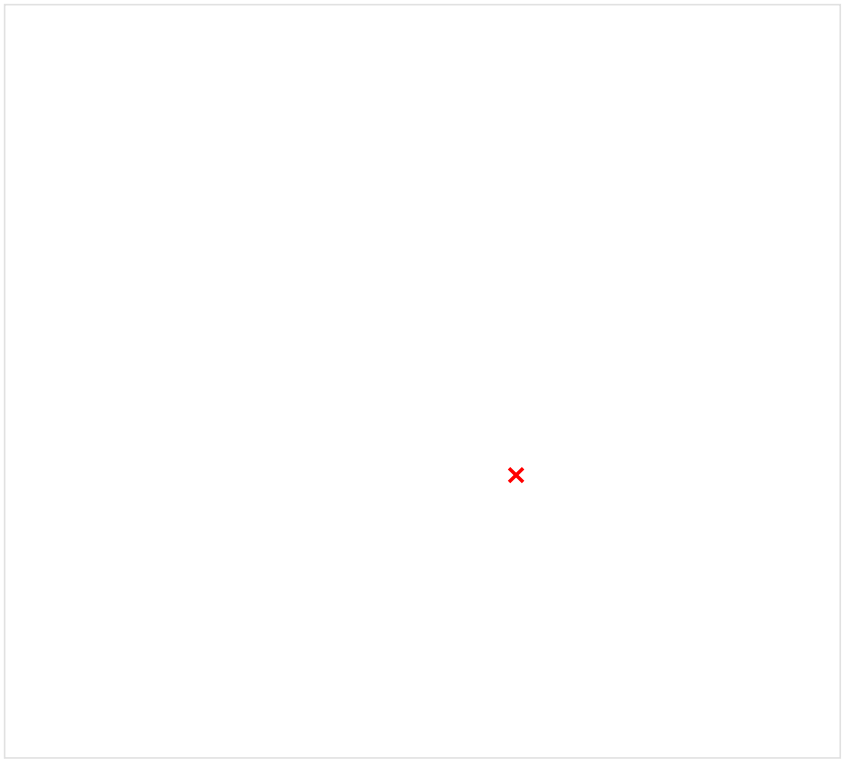
- Every supplier has the same issue, how do you change to combat another covid-19 scenario?
- Where did Sam get his market data numbers?
- How do you combat productivity drop with remote work?
  - Goal based work hours, depends on what u get done instead of time
- What areas are u targeting for marketing? America? Where in America? Map
- How to transfer Iracing connections to making a real purchases?
- How to make that connection to the consumer that its something real to buy?
  - A lot of tracks now have sim areas
- Overlap of people who do sim racing and real racing events and driving themselves
- Merch??
- Cost more, data?
- Transportation of data?
- How do they know the batteries are going bad?
- Profits of it?
- Make it easy for the community
- Show car again
- Work on transitions
- Review the rubric and see what topics aren't filled
- Maybe look over order
- Comparison better motor technology
- Competitors points need to relate more to why we are better
- Minor font size inconsistencies

05/01 meeting

Monday, May 1, 2023 10:01 PM

Goals of Meeting:
- Decide powertrain switch
- Decide what slides to keep and switch

Conclusion:
- Biofuel with a supercap system using starter motor boost
- Supercap has high discharge for use in starter
- Higher density fuel can reduce engine size
- (Turbo?)
- Opel Fuels and Arclite
- Weight saving and complexity
- Partnering with Biofuel companies
- Mild Hybrid Motors?
- Costs for the systems
- Feasability of Supercaps
- Sell sustainability and Performance with fuel
- Performance with Supercap



Research the marketing
Who we selling to
- Consumers of our competitors?

Why they buying
Accessibility
EV cant hang
Competitors? Or Spec Series
Are there Hybrid series?
Keep as much as possible (SCCA, Goodwood, SIM)
- Country clubbers like AMP

Fire suppression systems built in racecar

Change history of company

Talk why ecars didn't work
Run Time, Performance, Battery Life

***schedule review days with peeps next week

Profit margin and Burn Rate
Cost and Markup

5/10

Wednesday, May 10, 2023 9:16 PM

Britt's Presentation Feedback

Thursday, April 20, 2023 6:06 PM

Presentation Event
Judging Score Sheet

FORMULA SAE

University: Car#:

Que: Judge Initials:

The Presentation by the team should reflect an understanding by the team of the scenario put forward in the Presentation event section of the Formula SAE rules, while maintaining a direct relationship to the team's original goals and objectives of the entered vehicle.

Scores must be assigned any number or fraction (in 0.5 point increments) between 0 and the **maximum points available for that category.**

0% of the possible points = inadequate or no attempt
25% of the possible points = attempted but below expectation
50% of the possible points = average or expected
75% of the possible points = above average but not perfect
100% of the possible points = excellent, perfectly meets intent

/15 CONTENT: Was there recognition of the proposed scenario while maintaining a primary relationship to original vehicle targets and rationale? Was there appropriate coverage of the scenario's impact on technical, research & development, manufacturing, supply chain, finance, marketing, human resources, and sales concepts in the team's proposed solution? Were all aspects of the business integrated as part of an overall strategy?

/ 10 ORGANIZATION: Were the team's thoughts presented in a logical order of progress? Were the transitions from thought to thought clear and concise? Were distinct introduction and overviews as well as summary and conclusions given?

/ 15 DELIVERY AND VISUAL AIDS: Did the presenter(s) speak in a clear voice? Did they show enthusiasm and promote confidence in the presentation? Did they maintain eye contact? Were you convinced that they believed in what they were pitching? Were visual aids used or clear visual references made to the car? Were the illustrations visible for all the audience?

/ 10 QUESTIONS: Did the presenter(s) answers illustrate that they fully understood the questions? Did they create a feeling of complete confidence in their response to the questions? Did they readily accept the validity of the judges' question? Did they appear to be prepared for questions?

/ 50 TOTAL = PRESENTATION POINTS (50 points maximum)

COMMENTS:

© 2022 SAE International. All Rights Reserved

COMBUSTION & ELECTRIC CONCEPT:

2023 Business Presentation Concept

Your company's board has voted to take an aggressive approach to develop a vehicle powered by a different power source.

Coming out of a global pandemic, racing car production will shift to respond to significant global supply chain constraints, increased regulatory hurdles and rapid advancements in new technologies. Following the company's deliberate push to stay on the leading edge of propulsion system technology, you (as senior management) are to prepare and present a strategic plan that will implement a new power source; regardless of how new or cutting edge the current system is.

This strategic plan should take into account global supply chain issues, environmental impacts and sustainability, power source infrastructure developments, talent and labor issues (including remote work), user ease of implementation and safety, and market demand. You are also to develop the time frame for implementation of this strategic plan and all goals contained within it, including justification for whatever timeframe you choose. All these factors should build the business case for how this plan positions the company to maximize future success.

Reminders/Notes:

- Teams will be assigned 30-minute appointments.
- Time limit for the presentation remains 10 minutes to present.
- All presenters must be introduced at start of presentation.
- There is NO SUBMISSION for the 2023 competition season.
- All teams must participate in virtual presentation to be considered eligible for in-person competition.

Feedback 4/20: Rough draft of presentation and talking through flow.

Intro and Flow:

- Focus on storytelling. Abri had a good flow mentioned a week or so ago. Stick to that, then add some conversational transitions, and build your points and slides to climax at your Product Differentiation (what makes you better than the competitors). Implementation and the appendix should support *how* that differentiation will actually be created and *why* it makes your customers care (and your competition sweat).
- A note on flow: there's no right answer. It really doesn't matter if you go Intro>customer>product >marketing strategy> implementation or intro>product>customer>competition>marketing strategy/implementation. As long as the order is logical and helps you tell your story, it's good! With that in mind, here's some ways to do this throughout your presentation. Play around with the order and see what makes the most sense to you.
    - **Intro** = what we want to talk to you about and *why you should listen*
        - (in public speaking, this is called the "hook." It's what catches the audience's attention at the beginning. It can be a phrase, analogy, graphic, etc. It doesn't really matter what it is, but it should be quick and eye catching. Here's some ideas: https://www.skillpacks.com/presentation-hook/ BONUS POINTS if you close your presentation in reference with the same hook. 😉
    - **Customer** = who we are selling to and why they want our product over the competition's product. Describe the target market. Is there a specific pain point or problem that the customer has? Describe it. You want to be able to walk through life in their shoes and really understand why they buy what they buy.
    - **Competitors** = the other ways that the customer can resolve their pain point or solve their problem other than you.
    - **Product** = our solution to the customer need. You can also introduce the competition here. These two sections are closely intertwined.
    - **Climax** = what makes our offering different from the competition (in business terms, this is your product differentiation and competitive advantage). Explain how your product resolves the customer pain point or solves their problem. Show how you do this better than the competition.
    - **Implementation** = supporting information to prove *how* all of this will be done in reasonable terms (like SMART goals)

Target Market:

- Do people really still think that EV's are slow?
- Make sure graphs are well defined, clear, and relevant (include units of measure with numerical values.)
- All data should be backed up. Sources should be cited discretely in the slide itself, in the notes section, or on a reference slide.

Competition:

- Explain the basics of your competitors. How are they different from you? What is the main draw to their product? Not too much detail, just enough to give an idea of who you compare yourself to.
    - Consider using a map like the examples below as a visualization.
    - The values on the axis/quadrants represent the key factors in the industry.
    -

    -

Product:

- What problem does your customer have that your product solves? How does your current solution solve that problem?
- If you mention a partner company, make sure to describe who that partner is and what they do. Be brief, but don't leave the audience going "Who's WiTech?" If they're asking themselves that question, then they weren't listening to what you're saying.

Implementation:

- Dive further into supply chain. It seems to be a major current issue in the industry.
- How many companies supply the computer chips you need?
- What is the battery belt?
- The marketing promotion at events was good.
- You don't need to spend as much time on worker time remote vs in person. It's in the prompt, so you're correct to mention it, but save the details like that for the appendix and spend more time on the major topics – the things that make or break your success in implementation. Maybe retention and training practices, for example.
- At a glance, the 5 year plan looks good! Make sure it's thorough.
- Backup the 1000 car unit production number. Why 1000?

Feedback 4/24: Rough draft of presentation and talking through flow.

Logo I just have a picky critique....

Target market units consumer report survey
Are these the same units shown in the earlier slides?

I like the comparison to the old motor but tie it back to the customer
Product overview Needs more connection to the previous slides

Marketing strategies slide says product overview

How does the charging WiTech technology apply practically to raceways?

"Marketing Strat"? Add "egy" 😉
Too many pictures on the one marketing strategies slide
How many people attend these events? Give numbers on the influence

Not sure how I feel about the Ganntt chart...

Dr. Gala knows a person in automotive supply chain

Feedback 4/26: Final draft presentation

<u>Aesthetics</u>

- Some small fonts – try to keep to the same fonts and font size consistent across all slides
- Product overview – talk less to the specific words on the slide but more about HOW what's on the slides helps your point
- Supply constraints – label the diagram...?
- When verifying whether you answered the question sufficiently, still sound confident.

<u>Well Done!</u>
LOVE the competitor slide. Very clear feature comparison.
VERY clean slide transitions

<u>Context Questions</u>

- Marketing Strategies - What geographic section would you focus on in promotional events? Why?
- How do you connect the iRacing simulations to real purchases? Is there an overlap in people who race SCCA and people who do iRacing sims? If the end goal is brand image, how do you convince a sim racer that the KRT EV is a real car in real life that can be purchased and not just a cool option in the sim?
- How long does a charge take with Witricity charging stations?
- Implementation Plan – how do consumers get the batteries back to the recycler? It will need to be easy and convenient for the consumer to get it back to you or they just won't do it. You probably don't have many physical locations with a quantity of 300 units a year. So do you ship the battery packs for return? Do you have partners who can get it back to you or recycle locally?
- Gantt chart planning throughout the process?
- Supply Constraints - Make a slide listing outsourced and in-house manufactured parts.

Abri's Buiz notes

Thursday, March 30, 2023 5:39 PM

Initial Research Questions:

1. Define target market (Demographics, Psychographics, Behavioral, Geographic)
   a. Who buys race cars? Individuals? Groups? Businesses?
   b. Why do they buy race cars?
   c. What are some pain points they currently have?
   d. What do they like best about the current market options?
   e. How to they respond to change?
2. Define the current market
   a. How much does the average car cost to produce? What do they sell for?
   b. What kind of race cars are most popular? Why?
   c. Are there geographic "hubs" in racing, race car production, and race car purchasing? If so, what draws people to these hubs?
3. Market trends
   a. What new power source options are being tested currently? What are the pro's and con's to these options? Have they been tried before? Did it work? Why or why not?
   b. What options offer the greatest opportunities for expansion into other markets or iterative technologies?

Prompt:
Your company's board has voted to take an aggressive approach to develop a vehicle powered by a different power source.

Coming out of a global pandemic, racing car production will shift to respond to significant global supply chain constraints, increased regulatory hurdles and rapid advancements in new technologies. Following the company's deliberate push to stay on the leading edge of propulsion system technology, you (as senior management) are to prepare and present a strategic plan that will implement a new power source; regardless of how new or cutting edge the current system is.

This strategic plan should take into account global supply chain issues, environmental impacts and sustainability, power sour ce infrastructure developments, talent and labor issues (including remote work), user ease of implementation and safety, and market demand. You are also to develop the time frame for implementation of this strategic plan and all goals contained withi n it, including justification for whatever timeframe you choose. All these factors should build the business case for how this plan positions the company to maximize future success.

OOOOOGA BOOOOGA

- https://investingnews.com/daily/tech-investing/cleantech-investing/us-biofuel-stocks/
- https://opalfuels.com/renewable-natural-gas/
- https://opalfuels.com/press-releases/opal-fuels-pr-7-21-22-completion-business-combination/
- https://www.anl.gov/partnerships/biofuels-from-photosynthetic-bacteria-anlin09001
- https://biotechnologyforbiofuels.biomedcentral.com/articles/10.1186/s13068-020-01853-2
- https://www.sciencedirect.com/science/article/pii/S2542435122002380?via%3Dihub
- https://newscenter.lbl.gov/2022/06/30/bacteria-for-blastoff/
- https://newatlas.com/energy/bacteria-biofuel-higher-energy-density-jet-fuel/

Notes:
Company in US trying to bring back consumers from Asian markets?
Could play towards legacies (nascar, ivy) and personalization (hand manufactured) also judges can understand easier
Keep in mind creativity, need an angle that judges haven't heard/seen
Some cool markets to talk into could be FT Cars Convention, Global Climate Summit COP 28, or taking the angle of being a startup in Europe taking over the lux industry like NIO, or you could go the route of a company at an event like Le Mans

https://www.ravin.ai/blog/automotive-conferences-2022
^^more conventions if we want to go that route

Sell direct to consumer:

- Can ensure that their products meet these high standards and offer a unique buying experience that aligns with the brand's values
- No middle man thus allowing for greater flexibility and more responsive marketing strategies to tailor better to the consumer
- DTC is becoming increasingly popular in more and more industries, OEM's will eventually have to adjust or they will fall outof the market scene
- Not a lot of OEM's companies collect their own data, meaning there is another middle man between the company and the data ofwhat the consumers want, and large manufactures like VW are having to start their own DTC programs and gather data. With DTC you don't have that issue
- Why is data so important? bc regardless of selling a car whole or just technology, you being a smaller company don't have a lot of backing to fall onto if you have a bad sales year. So keeping up with the trends and consumer demands is vital to making sure companies and/or consumers will keep buying
- CTC and Dealerships also have a bad rep, as you will get scammed or ripped off, as well as being shamed for the market valuedrop from car the moment it is driven off the car lot. Likely not as big of a problem with high end cars, but still note worthy
- Most importantly though, without the tag of an OEM company, you can more easily make a name for yourself in fields outside ofjust retail

- Challenges you may face selling DTC are...less financial backing then ur competitors (OEM), more investment into marketing distribution, and customer support infrastructure, and having to build new trust with consumers and "brand name"
- Challenge 1 is not the worst problem because of the booming DTC market, there are a lot of investors, but you still have to convince them and keep up relations
- Challenge 2 can be overlooked as OEM companies built on engineering capabilities are now having to invest in greater in customer experience, which for most companies is uncharted waters
- Challenge 3 is likely the most difficult hardship new DTC companies will face, even with the use of social media, building trust with consumers takes time and can easily be destroyed in the beginning like ur GPA

Sources:

- https://www.mckinsey.com/~/media/mckinsey/industries/automotive%20and%20assembly/our%20insights/a%20future%20beyond%20brick%20and%20mortar%20disruption%20in%20automotive%20retail/a-future-beyond-brick-and-mortar-disruption-in-automotive-retail-vf.pdf

- https://hbr.org/2021/11/how-direct-to-consumer-brands-can-continue-to-grow

- https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/the-new-key-to-automotive-success-put-customer-experience-in-the-drivers-seat

- https://www.forbes.com/wheels/advice/car-buyers-want-a-hybrid-of-online-and-offline-shopping/

Implementation:

- As stated above, without the tag of an OEM brand-name, you can more easily make your product exactly how you envision it
- Example: Say you are an IC company switching to make EV cars under a new branch, with this new name you can implement new features and get rid of any stigma your old cars had. Implementing new demanded features like selling directly through its website/app, addons, and customer-centric services. While also keeping around old features such as test drives and car viewing that consumers still want. You can also offer renting for lux cars that most people can't afford normally, while increasing consumer experience by allowing them to do all paperwork online.
-

My Findings: Define the current market

a. How much does the average car cost to produce? What do they sell for?
   i. https://www.llcllc.com/post/how-much-does-it-actually-cost-manufacturers-to-make-a-car
      i. The profit margin for a lux car is typically 10-20k per car, meaning if the car sells for 500,000 than the cost is close to 485,000
      ii. Lower end cars have relatively the same margins
   ii. https://www.carscoops.com/2022/02/how-does-an-f1-team-spend-450-million-in-a-year-and-still-make-a-profit/
      i. Formula cars on the other hand tend to only make a 10-40 million profit and spend up to 450 million, however this does not include the revues pulled in by the team being in formula one and the marketing it brings to the company

b. What kind of race cars are most popular? Why?
   i. https://motorracingsports.com/what-are-the-most-popular-motorsports-in-the-world/
      i. For actual race cars, Formula One is the most viewed race with roughly 87 million, next being Nascar at 12 million, and MotoGP getting 3 million, and lastly Indy car.
   ii. The first and second link below (C i. & C ii.)
      i. However, in the lux car scene, as previously stated, SUV's are seen to be the most popular
      ii. And features matter more than

c. Are there geographic "hubs" in racing, race car production, and race car purchasing? If so, what draws people to these hubs?
   i. (https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/five-trends-shaping-tomorrows-luxury-car-market)
      i. North America and Europe currently dominate the sales for lux cars, however in the next 8 years the market is shifting toward Asia and the middle east
      ii. Also is a shift in more ppl buying lux cars because of the increasing number of UHNWI and HNWI, ultrahigh-net worth individuals and high net worth individuals respectively
      iii. While a formula car is technically not a lux car, I am counting it as one as the distinction for lux cars are 80,000 or more in price
   ii. https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/the-new-realities-of-premium-mobility
      i. America, Europe, and Asia all prioritize different wants from a lux vehicle, keep that in mind when choosing markets
   iii. https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/new-ev-entrants-disrupt-europes-automotive-market
      i. Looks like while the market moves to Asia, the EV market in Europe is being taken over by new manufactures from Asia
      ii. NOTE: this also has a lot of good data on market of ppl wanting EV

Recycling Sources:

- https://electrek.co/2022/10/13/us-ev-battery-belt/
- https://pubs.acs.org/doi/full/10.1021/acs.energyfuels.2c02889
- https://www.reneos.eu/case/how-battery-repair-centres-extend-the-life-cycle-of-ev-batteries
- https://www.recurrentauto.com/research/costs-ev-battery-replacement
- https://www.nytimes.com/2022/10/19/business/electric-vehicles-carbon-footprint-batteries.html
- https://www.washingtonpost.com/business/energy/ev-battery-recycling-has-boomed-too-soon/2023/02/22/ea5e75a6-b2b7-11ed-94a0-512954d75716_story.html
- https://www.canarymedia.com/articles/recycling-renewables/the-biggest-ev-battery-recycling-plant-in-the-us-is-open-for-business
- https://earthworks.org/wp-content/uploads/2021/09/UTS-EV-battery-metals-sourcing-20210419-FINAL.pdf
- https://www.solarenergy.org/lithium-ion-battery-recycling/
- https://www.vice.com/en/article/xgxke4/when-tesla-says-it-recycles-100-of-its-batteries-what-does-that-mean
- https://www.bcg.com/publications/2020/case-for-circular-economy-in-electric-vehicle-batteries
- https://www.sciencedirect.com/science/article/pii/S2666202721000161#bbib0001
- https://blog.ucsusa.org/hanjiro-ambrose/the-second-life-of-used-ev-batteries/

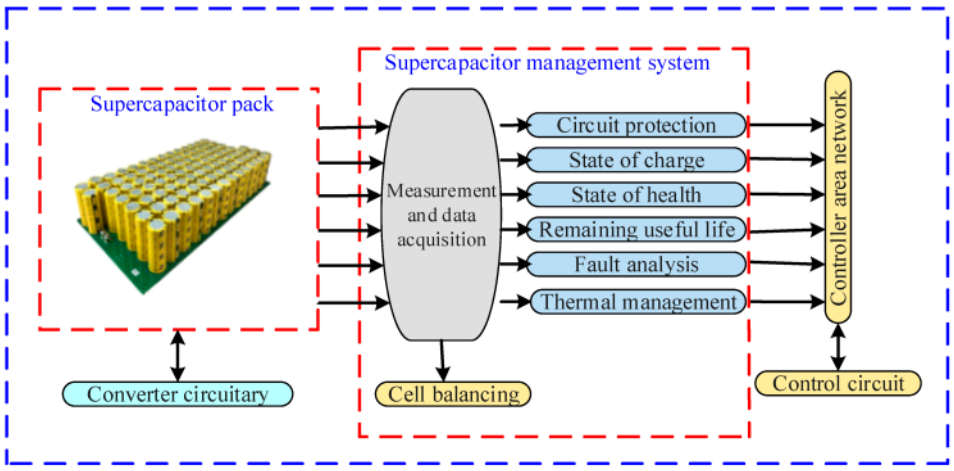
Structures Sources:

- https://www.atlantamotorsportspark.com/news/atlanta-motorsports-park-becomes-first-race-track-to-install-level-3-fast-chargers-for-high-performance-evs/
- https://www.trackmyev.com/track-charging
- https://www.thedrive.com/accelerator/formula-e-is-testing-its-lightning-fast-charging-pit-stops
- https://new.abb.com/news/detail/96973/abb-unveils-mobile-charger-for-formula-e-season-9
- https://www.cars.com/articles/what-is-level-1-2-3-charging-437766/
- https://www.forbes.com/wheels/advice/ev-charging-levels/
- https://www.greencarreports.com/news/1136234_why-wireless-charging-matters-for-electric-cars
- https://arstechnica.com/cars/2022/09/whats-the-state-of-wireless-ev-charging/
- https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/perspectives-on-wireless-and-automated-charging-for-electric-vehicles
- https://witricity.com/wp-content/uploads/2022/05/The-Electric-Car-Unplugged-Final.pdf
- https://witricity.com/wp-content/uploads/2021/11/WiTricity-EV-Adoption-Survey-Infographic-scaled.jpg
- https://witricity.com/wp-content/uploads/2022/11/Tech-Paper_Leave-the-filling-station-behind.pdf
- https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/europes-ev-opportunity-and-the-charging-infrastructure-needed-to-meet-it
- https://www.mckinsey.com/industries/public-and-social-sector/our-insights/building-the-electric-vehicle-charging-infrastructure-america-needs
- https://www.pluglesspower.com/wp-content/uploads/2021/02/Plugless-Power-Company-Presentation-Rev-F.pdf
- https://www.pluglesspower.com/wp-content/uploads/2017/03/Digital_Brochure_Generic.pdf
- https://www.sae.org/standards/content/j2954_202208/preview/

Pacemaker safety
https://witricity.com/newsroom/blog/your-pacemaker-is-safe-with-wireless-ev-charging/

Heily's EV BUSINESS

Thursday, May 4, 2023 5:35 PM



*** have employees identity circuit protection, state of charge, etc. (appendix)
https://aftermarket.zf.com/remotemedia/new-structure-2020/zf-aftermarket/pdf-s/training-high-voltage-vehicles-200-006-en.pdf

Britt's Notes

Thursday, April 6, 2023 8:31 PM

The Basics of Supply Chain: https://www.investopedia.com/terms/s/supplychain.asp

General Questions

- What % of total production inputs are recycled materials versus raw materials? (This is important especially since using recycled materials is one of your points.) If not many people recycle, why is this? How can you incentivize them do more?
  - Examples: Recycling: Redwood Materials and Tesla/Ford/Volvo; Repurpose Energy
- How do consumers get the packs to the recyclers?
- Where does your company fall in this supply chain?
- If refiners are the bottleneck, how much do they produce annually? Is that enough to sustain your current and projected demand? If not, are there any alternatives?
- To dive extra deep, take a look at the geographical region of the raw materials sources and refiners locations. Why are they there? What characteristics does that place have that other places don't have? Is there anything they lack that you could provide to them? Is there any way you can leverage that knowledge when choosing partners or negotiating resources?
  - Geographic Sources of these materials: https://elements.visualcapitalist.com/ranked-top-25-nations-for-battery-metals/

Supply Chain Trends:

- Increased automation technology
- Influence and implementation of AI and augmented reality
- "mineral market" leaders in refinement and extraction
- US government involvement in mineral market and "critical minerals"
  - https://www.usgs.gov/news/national-news-release/us-geological-survey-releases-2022-list-critical-minerals
- Trends in the Energy Market in general (other products that use the same raw materials as EV lithium-ion batteries)
  - https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions/mineral-requirements-for-clean-energy-transitions
- Circular Economy

General Research:

EV (lithium-ion battery) Supply Chain Basics:
https://rmi.org/ev-batteries-101-supply-chains/
https://www.nrdc.org/bio/jordan-brinn/electric-vehicle-battery-supply-chains-basics

Ironic: "As a result, the metals mining industry is the largest single source of toxic waste in the United States."

Raw Materials: lithium, nickel, cobalt, manganese, and graphite.
Bottlenecks: https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions/executive-summary
Data and Statistics: https://www.iea.org/data-and-statistics

Marketing to Companies

Idea: be MIT of Motorsports

Competition:

Implementation:

Manufacture a base model as a part of the value chain

Selling base models to companies that could customize to consumer preferences

Also doing R&D for companies to test new technologies before they hit the production floor

Create IMSA all electric class? Sell chassis to regulation specs that race teams could purchase and then modify. Could also offer the R&D to racing teams on the side.

Marketing to Individuals

Idea: custom garage for "weekend racers"

Competition:

Ariel Atom

Radical Motorsport

SRF-E (built specifically for SCCA)

> "In the Fall of 1985 SCCA Enterprises, a division of SCCA Ventures, was founded to take over the manufacturing and production of the Sport Renualt (an inexpensive spec car for the club racing scene.) SCCA utilized SCCA Enterprises corporation to take over the Sport Renault (our original spec car) and everything was brought to Denver, Colorado and SCCA Enterprises as we know it began.
>
> Our original car, the Sport Renault, was introduced in the early to mid 80s as an affordable entry into the sports racing world (originally being developed and manufactured by Renault/Jeep Sport.) In 1989, Renault changed direction and the SCCA made the decision to replace the original Renault drivetrain with a 1.9-liter engine and five-speed transmission manufactured by the Ford Motor Company, eventually changing the Sport Renault (SR) name to Spec Racer® Ford (SRF).
>
> In 2013 (because of declining availability of engine parts) we announced the Spec Racer® Ford Gen3 (1.6 Liter Ford Sigma motor) under the supervision of Technical Director Mike Davies. Since the launch of the SRF Gen3 we have successfully completed over 500 Gen2 to Gen3 conversions. Today, the Spec Racer® Ford class is the #2 subscribed national class with over 35 years history producing top notch, affordable and safe racing cars."

Substitutes:

EV conversion kits (EV West) - also these

Implementation:

Provide the labor and the chassis for EV conversions?

Reasoning:

Makes most sense for IC to EV because the EV market is just beginning to diversify in the early stages of the product life cycle

Marco's Notes

Thursday, April 13, 2023 2:00 AM

VD
Lower CG than competitors due to battery pack
Helps around corners
Keeping RWD only to keep performance
LSD For Performance on track course

Motor Technology

Radial motor technology no bueno Axial Motor more efficient better packaging
Lighter Weight
Increase in power density

Battery Technology

Pouch cells run cooler due to lower impedance
increased surface area, heat dissipates better than it does with cylindrical cells

Metric is C-rate, How much of its capacity can be used in 1 hr
6C can us 6x capacity for 1/6th the time

46800 Li-ion Cells

333 WH/Kg No Silicon, Aluminum,
118 WH

Standard 2170
18.23WH
Up to 300 WH/Kg

Working with Tesla and Panasonic to further develop the 46800

https://www.dnkpower.com/lithium-battery-4680-vs-18650/#:~:text=The%20cycle%20life%20of%20a,on%20the%20nature%20of%20charging.

https://insideevs.com/news/598656/tesla-4680-battery-cell-specs/

https://history-computer.com/4680-battery-cells/

2023 EV Bis Notes

https://www.eetimes.com/electronic-starter-alternators-power-hybrid-vehicles/

Regen Braking Efficiency

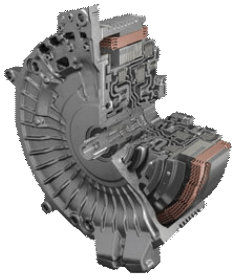
Sarter/ Alternator Motor Selection

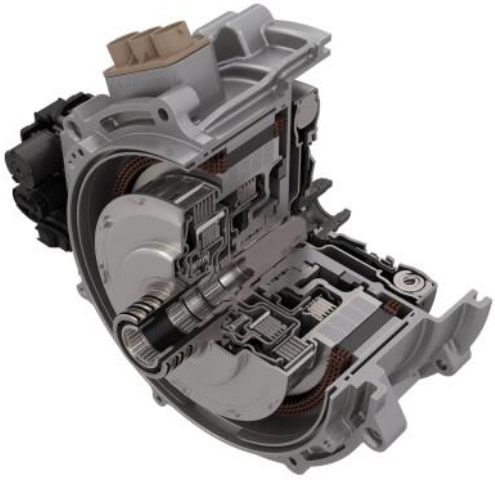
Super Cap Selection

Toyota 1.6L 3Cyl
https://impactful.ninja/the-carbon-footprint-of-biodiesel/#:~:text=One%20gallon%20of%20biodiesel%20emits,and%20have%20various%20environmental%20benefits.

Bio-Fuels produce less carbon emissions

4





Sam note ;)

Wednesday, May 10, 2023 1:47 AM

Sam Presentation Questions:

only look at 9:00 am Wednesday

-

We offer:

- Racing engine that runs on alternate fuel
- Exposure
- Brand image

VP

- Develop bacteria fuel
- Interest from companies to develop this fuel
- Partnered with IMSA

What do that look like:

- Our research and development of our power train, with VP will provide them with more research into a different power train application and develop a higher energy dense fuel

- They also gain valuable brand exposure as they become the official race fuel of the KRT-S
- We want to partner with them bc we think they share the same commitment to performance as we have at our company

We

- Partner with company bc known brand
- With experience in field

Notes for shit we need to add:

- What we offer?
  - Distinguish our brand from every other performance hybrid company
- Company ROI
- Initial Investment Usage (precent)
- Explain what is wrong with the partner company and how the partnership of us and the company will benefit and bring something new to the table
- Walk them through our processes
  - How does the fuel work
  - What does race day look like
  - What is our facilities like
  - How do we make decisions
- Sales goals
- Breakdown Primary and Secondary sources of income
- Cost development breakdown by year, broken down by source
- Cashflow development
  - What are the breakdown
- Investor Return
  - Interest rate and profit share breakdown
- Supply chain breakdown step by step (flowchart)
- Show the flowchart of breakdown of an initial investment and where it goes
- Set the stage in the beginning a little to how and why something is worth investing into
  - Why hybrid, market growth of hybrid? Insert sustainability

Buiz IC Feedback

Thursday, June 8, 2023 11:31 AM

Abri's Written Feedback from IC COMP

**these are my notes of the overall feedback they gave to all teams, just overviewing what they saw and liked vs disliked*

- Design Matrix, show design considerations
- Liked the detail of knowledge, wanted more sources
- They see themselves as stakeholders/board of directors
- For design finals, take time, breathe, smile, they wanted more interactions
- Show the decision process
- Be excited and enthusiastic about what you are presenting
- Advertisement before cars are launched, marketing timeline
- "smart consumer" your consumer is not dumb and you should not treat them as such
- Furthering they can easily fact check your statements like the ethics in cobalt mining
- Thought hybrid over full EV, e-fuels, or biofuels" was the best route
- Ethics of your company is big, address it
- Look at smart briefs, tech briefs, white pages for information on the topic
- Have shown "commitment to the future", where the company will be in 2028 or 2033
- "house of quality" for the design matrix
- Make sure market has REAL incentive
- Be wary of using team colors in graphs, can be confusing to have multiple different shades of blue and for finals, might be hard to see outside
- Like colors like red, yellow, green to show good, bad, okay because its standard
- Like cheesy marketing strats bc its memorable and funny
- Liked having students present themselves as "CEO, COO, CMO, etc" so that they knew who to talk to for questions
- Reintroduce yourself at the end and THANK THEM
- Other teams could be your competitors instead of industry cars and you can pull data on them from last year's competition results
- Being memorable is more important than having a good presentation (ur only 1 out of 120)
- Some memorable things they say were being completely exact to prompt, word for word, having humor, and having a well thought out appendix
- Like being given a pamphlet or booklet for finals, but make sure if you have one it doesn't distract from what your presenting but rather enhance it
- A good pamphlet had blown up images of graphs that may be hard to read in-person
- They like you catering to all the senses as much as you can, including sounds like car revs
- Present to new members to get their feedback on things u may have missed or that may be confusing for those who don't know your car inside and out
- Address why the board would even want to make this change
- Don't spend a lot of time on technology upgrades
- Make sure to mention in first/second slide, what your change actually is ie. Hybrid, electric, e-fuels
- "swat" analysis can be helpful if used correctly
- Add slide number to slides
- Mention investment, price point of car, maintenance fees, fueling fees, justify
- LOVED the idea of a jeopardy board/FAQ bc they have script questions and often are reading through those trying to find one
- 9:30-10:10 is the ideal time :D

Buiz EV feedback

Thursday, June 15, 2023 11:43 PM

Business Public Feedback Notes
Market segmentation
Compare to FSAE cars
Make Target Market make sense
Identify specific factors
Prepare earlier
Present to new members,
Scripts are bad
Shark tank
Enthusiasm
Specific Budgets for everything
Read the prompt religiously
Be unique

EV pres shit
Pamphlet earlier

Buis will be harder next year
There might have been a prompt FAQ?!?!

Kvaser blurb

Wednesday, May 29, 2024 5:33 PM

An article with a couple of pics for stating how your team uses the Kvaser product with your vehicle

- For joint marketing purposes

- Publish the article on our web site and social media

From <https://mail.google.com/mail/u/0/?tab=rm&ogbl#search/kvaser/FMfcgzGxRdvsPBVbZLgqXsBwtnWtBcXv>

Kvaser's donated equipment has been invaluable to us as this season as we bring up and continue to test our 2024 EV. We use the Leaf Light HS V2 interfaces along with Kvaser's CAN King software to view our vehicle CANbus and monitor ECU signals, as well as with Kvaser's CANlib SDK integrated into our own custom scripting software. Kvaser's Database Editor software has also been invaluable as we iterate and expand our CAN database