



Institute of Food Technologists
Student Association



**Developing Solutions for Developing Countries
Product Development Competition**

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Developing Solutions for Developing Countries Preliminary Proposal Rubric

Product Pitch (30 Points)

Appeal of the Product (10 Points)

10-8 Points: Justifies why many target consumers will prefer this product over alternatives.

7-4 Points: Justifies why some target consumers will prefer this product over alternatives.

3-0 Points: Does not justify why target consumers will prefer this product or does not differentiate itself at all.

Need for the Product (10 Points)

10-8 Points: Justifies why the product would be very beneficial to the selected region.

7-4 Points: Partially justifies why the product would be beneficial to the selected region but doesn't support the claim completely.

3-0 Points: Does not justify why the product would be beneficial to the selected region.

Description of Product (10 Points)

10-8 Points: Describes the product clearly and completely.

7-4 Points: Some aspects of the product are unclear, though the general idea is communicated.

3-0 Points: The product idea is unclear or incomplete, hindering the understanding of this proposal.

Product Description (10 Points)

Description of Ingredients (5 Points)

5-4 Points: Provides a clear description of the product's ingredients.

3-2 Points: Omits a few major ingredients from the description.

1-0 Points: Fails to adequately describe the product composition.

Ingredient Importance (5 Points)

5-4 Points: Provides justification of why each major ingredient is important in the formulation.

3-2 Points: Flawed logic or ignored ingredients undermine the justification.

1-0 Points: The section does not provide any reasoning for the importance of ingredients.

Process Description (15 Points)

Completeness of Commercial Manufacturing Plan (5 Points)

5-4 Points: Process description does not miss any important steps or processing parameters. Product is commercially manufactured using this general process that would be safe, high quality, and consistent with the product's description.

3-2 Points: Process description is missing a few minor details or contains a few minor mistakes that could lead to an undesirable product.

1-0 Points: Commercial manufacture will not be feasible due to being unclear, incomplete, or highly problematic. No points should be given to a proposal which only describes the benchtop process instead of the scaled-up commercial manufacture.

Process Flow Diagram (5 Points)

5-4 Points: Process flow diagram clearly summarizes all steps and parameters of the product's commercial manufacture.

3-2 Points: Process flow diagram is missing minor steps or is unclearly organized.

1-0 Points: Process flow diagram is missing major steps.

Product Safety and Quality (5 Points)

5-4 Points: Justifies why the process will ensure a safe and high-quality product.

3-2 Points: Partially justifies why the process will ensure a safe and high-quality product, but omits key details or includes mistakes.

1-0 Points: Does not justify why the process will ensure a safe and high-quality product.

Technical Problem Solving (15 Points)

Technical Problem-Solving Success (10 Points)

10-8 Points: Justifies why the given solution was the best choice considering the context of the product and demonstrates that the technical problem is fully resolved.

7-4 Points: The solution is either partially unjustified, or the technical problem is not fully resolved.

3-0 Points: The solution is not justified, or the technical problem is not resolved.

Demonstration of Food Science Knowledge (5 Points)

5-4 Points: Demonstrated some application of technical food science knowledge during the process of problem solving.

3-0 Points: Did not demonstrate any application of technical food science knowledge during the process of problem solving.

Impact (30 Points)

Product Impact (10 Points)

10-8 Points: Provides a detailed evaluation of how the product will impact the target region, justified with sound logic and evidence (where needed).

7-4 Points: Describes the product's impact in the target region but is either missing minor impacts or does not justify its claims well.

3-0 Points: The description of product impact is incomplete or completely unjustified.

Adherence to Prompt (10 Points)

10-8 Points: Product completely addresses all aspects of the DSDC competition promptly.

7-4 Points: Product only addresses some aspects of the DSDC competition promptly.

3-0 Points: Product does not address the DSDC competition prompt.

Accessibility (10 Points)

10-8 Points: The product is highly accessible to people in the target region.

7-4 Points: The product is somewhat accessible to people in the target region.

1-0: The product is not accessible to people in the target region.

Developing Solutions for Developing Countries Final Proposal Rubric

Product Pitch (15 Points)

Description of Product and Packaging (5 Points)

5-4 Points: Describes the product and all aspects of packaging clearly and completely.

3-2 Points: Some aspects of the product and/or package are unclear, though the general idea is communicated.

1-0 Points: The product idea and/or package is unclear or incomplete, hindering the understanding of this proposal.

Need for the Product (5 Points)

5-4 Points: Justifies why the product would be very beneficial to the selected region.

3-2 Points: Partially justifies why the product would be beneficial to the selected region but doesn't support the claim completely.

1-0 Points: Does not justify why the product would be beneficial to the selected region.

Description of Product (5 Points)

5-4 Points: Describes the product clearly and completely.

3-2 Points: Some aspects of the product are unclear, though the general idea is communicated.

1-0 Points: The product idea is unclear or incomplete, hindering the understanding of this proposal.

Technical Product Description (10 Points)

Description and Justification of Formulation (5 Points)

5-4 Points: Justifies the use of every ingredient by describing their functionalities in the product and defending their inclusion.

3-2 Points: Flawed logic or unjustified ingredients undermine the description of the formulation.

1-0 Points: The ingredient functionalities are either not included, or the section does not provide any reasoning for their selection of ingredients.

Description and Justification of Packaging (5 Points)

5-4 Points: Justifies the product's packaging by describing their packaging system and defending the choices made during its creation.

3-2 Points: The description of the packaging is missing minor details, or some flawed logic undermines their packaging choices.

1-0 Points: The description of the packaging is missing major details, or their packaging choices are deeply flawed.

Process Description (10 Points)

Completeness of Commercial Manufacturing Plan (5 Points)

5-4 Points: Process description does not miss any important steps or processing parameters. Product is commercially manufactured using this general process that would be safe, high quality, and consistent with the product's description.

3-2 Points: Process description is missing a few minor details or contains a few minor mistakes that could lead to an undesirable product.

1-0 Points: Commercial manufacture will not be feasible due to being unclear, incomplete, or highly problematic. No points should be given to a proposal which only describes the benchtop process instead of the scaled-up commercial manufacture.

Process Flow Diagram (5 Points)

5-4 Points: Process flow diagram clearly summarizes all steps and parameters of the product's commercial manufacture.

3-0 Points: Process flow diagram is either incomplete or unclear.

Technical Problem Solving (10 Points)

Technical Problem-Solving Success (5 Points)

5-4 Points: Justifies why the given solution was the best choice considering the context of the product and demonstrates that the technical problem is fully resolved.

3-2 Points: The solution is either partially unjustified, or the technical problem is not fully resolved.

1-0 Points: The solution is not justified, or the technical problem is not resolved.

Importance/Prominence of Technical Problems (5 Points)

5-4 Points: Solving these problems were vitally important to the viability of the product, drastically improving its feasibility, safety, profitability, or quality.

3-2 Points: Some problems discussed were important to product viability, but one was not a prominent problem. It is unclear why it was included instead of other large issues.

1-0 Points: The problems discussed were not relevant to product viability. Either the team is unaware of larger issues, or these larger issues were ignored for the sake of this section.

Safety/Shelf Life (10 Points)

Product Safety (5 Points)

5-4 Points: Describes all major hazards in the product and how they can be controlled.

3-2 Points: Minor mistakes or omissions in the safety plan need to be corrected.

1-0 Points: Major mistakes or omissions undermine the product's potential to be manufactured safely.

Shelf Life (5 Points)

5-4 Points: Discusses the expected shelf life and its mode of failure with sufficient reasoning to support the logic.

3-2 Points: The shelf-life estimate, while potentially accurate, is not adequately supported.

1-0 Points: The shelf-life estimate is unrealistic and completely unsupported.

Economic Feasibility (20 Points)

Profitability (5 Points)

5-4 Points: Demonstrates clear profitability with support from cost analysis (including ingredients and packaging).

3-2 Points: Demonstrates profitability but with limited support from cost analysis.

1-0 Points: Missing information, unrealistic estimates, or mistakes undermine the claim that the product will be profitable.

Justifies Product Price (5 Points)

5-4 Points: Clearly justifies a realistic product price in relation to competitors and the preferences of target consumers.

3-2 Points: Partially justifies a realistic product price.

1-0 Points: Product price is either completely unjustified or unrealistic.

Practicality and Logistics in Target Region (10 Points)

10-8 Points: Completely and accurately addresses how the product would manage the supply chain in the target region (including ingredient supply, product processing, and product distribution), with no missing gaps.

7-4 Points: Misses some aspects of the supply chain in the target region.

3-0 Points: Does not discuss the supply chain of ingredients and/or the distribution of the product.

Impact (20 Points)

Product Impact (15 Points)

15-11 Points: Provides a highly detailed, comprehensive evaluation of how the product will impact the target region, justified with adequate evidence (where needed).

10-6 Points: Describes the product's impact in the target region but is either missing minor impacts or does not justify its claims well.

5-0 Points: The description of product impact is incomplete or completely unjustified.

Feasibility of Starting Production (5 Points)

5-4 Points: The product and its production process could be quickly and feasibly implemented because of the completeness and attention to detail of this report.

3-2 Points: The product and process have potential to be feasibly implemented, but minor revisions or additional information are needed before implementation.

1-0 Points: It is unclear if the product/process could be feasibly implemented. This idea needs major revisions or much more additional information.

Adherence to Prompt (5 Points)

5-4 Points: Product completely addresses all aspects of the DSDC competition promptly.

3-2 Points: Product only addresses some aspects of the DSDC competition promptly.

1-0 Points: Product does not address the DSDC competition prompt.

Developing Solutions for Developing Countries Oral Presentation Rubric

Product Description (5 Points)

Description of Product, Packaging and Formulation (5 Points)

5-4 Points: Describes the product, packaging, and formulation clearly and completely.

3-2 Points: Some aspects of the product/packaging/formulation are unclear, though the general idea is communicated.

1-0 Points: Many aspects of the product, packaging, or formulation are unclear, hindering the understanding of this presentation.

Process Description (10 Points)

Process Flow Diagram (5 Points)

5-4 Points: Process flow diagram clearly summarizes all steps and parameters of the product's commercial manufacture. Critical control points are included.

3-2 Points: Process flow diagram is difficult to view or understand.

1-0 Points: Process flow diagram is missing major steps or is very unclearly organized.

Completeness of Commercial Manufacturing Plan (5 Points)

5-4 Points: Product commercially manufactured using this process would be safe, high quality, and consistent with the product's description.

3-2 Points: The processing plan contains a few minor mistakes that could lead to an undesirable product.

1-0 Points: The processing plan will not be feasible due to being highly problematic.

Safety/Shelf Life (10 Points)

Product Safety (5 Points)

5-4 Points: Discusses the few most prevalent hazards in the product and how they will be completely controlled. This product will be manufactured safely if production starts immediately.

3-2 Points: Major mistakes or prevalent omissions in the HACCP plan need to be corrected before the product can be manufactured safely.

1-0 Points: The safety of the product is not discussed.

Shelf Life (5 Points)

5-4 Points: Discusses the expected shelf life and its mode of failure with a thorough justification that supports the predictions.

3-2 Points: The shelf-life estimate, while potentially accurate, is not adequately justified.

1-0 Points: The shelf-life estimate is unrealistic and completely unjustified.

Practicality / Logistics of Implementation (15 Points)

Practicality and Logistics in Target Region (10 Points)

10-8 Points: Completely and accurately addresses how the product would manage the supply chain in the target region (including ingredient supply, product processing, and product distribution), with no missing gaps.

7-4 Points: Misses some aspects of the supply chain in the target region which would lead to issues in production or distribution.

3-0 Points: Does not discuss the supply chain of ingredients, processing and/or the distribution of the product.

Feasibility of Starting Production (5 Points)

5-4 Points: The product and its production process could be quickly and feasibly implemented because of the completeness and attention to detail of this presentation.

3-2 Points: The product and process have potential to be feasibly implemented, but more issues need to be thought out before implementation.

1-0 Points: It is unclear if the product/process could be feasibly implemented. This idea needs much more detail.

Impact on Developing Country (10 Points)

Product Impact (10 Points)

10-8 Points: The product will have a beneficial impact on the lives of people in the target region. The presentation justifies their claims with adequate evidence and sound logic.

7-4 Points: The product will have a beneficial impact on the lives of people in the target region. The presentation somewhat justifies their claims but lacks some evidence or contains some logical flaws.

3-0 Points: It is unclear if the product will have a beneficial impact on the lives of people in the target region due to non-existent evidence or major logical flaws.

Persuasion of Product's Potential to Succeed (10 Points)

Persuasion of the Product's Potential (5 Points)

5-4 Points: The presentation convinces the audience (as Food Scientists) that this product would feasibly succeed as a real food product, considering all aspects of product development (profitability, practicality, safety, etc.).

3-2 Points: The presentation partially convinces the listener of this product's potential, but some aspects of the product need more development or justification.

1-0 Points: The presentation does not convince the listener that this product could feasibly succeed as a real food product on the market.

Appeal of the Product (5 Points)

5-4 Points: Justifies why many target consumers will prefer this product over alternatives.

3-2 Points: Justifies why some target consumers will prefer this product over alternatives.

1-0 Points: Does not justify why target consumers will prefer this product or does not differentiate itself at all.

Verbal Presentation (10 Points)

Speaker Engagement (5 Points)

5-4 Points: Speakers are highly confident and engaging while maintaining strong vocal projection throughout. (Though please understand that English may not be everyone's first language)

3-2 Points: Speakers show limited confidence, with noticeable lapses in engagement and vocal delivery.

1-0 Points: Speakers lack confidence, frequent hesitations and lack of engagement.

Logical Flow (5 Points)

5-4 Points: The oral delivery follows a clear and logical flow, effectively transitioning between topics.

3-2 Points: The flow of the oral delivery can be understood, but certain moments are difficult to follow.

1-0 Points: The oral delivery is disorganized and difficult to follow.

Quality and Content of Slides (5 Points)

Organization of Slides (5 Points)

5-4 Points: Slides are exceptionally well- organized with very clear content, being quickly understood and visually appealing.

3-2 Points: Slides are somewhat organized, with some mistakes hindering the clarity of content or visual appeal.

1-0 Points: Slides are poorly organized and difficult to understand.

Ability to Answer Questions (25 Points)

Content of Answers (20 Points)

20-14 Points: The team provides thorough and convincing answers to questions, with sound logic or scientific reasoning.

13-7 Points: The team provides adequate responses to most questions, but with some aspects left unaddressed or unjustified.

6-0 Points: The team is unable to adequately answer questions.

Confidence and Clarity of Answers (5 points)

5-4 Points: The team responds clearly and confidently to questions.

3-2 Points: The team's responses to questions can be understood but somewhat lack clarity or confidence.

1-0 Points: The team's responses to questions cannot be understood, being completely unclear and unconfident.