

TechConnect Ventures Sprint Challenge Brief:

Packaging Innovations For Product Integrity

BACKGROUND

Packaging can identify products, keep them separated from one another, and protect them from transportation or environmental damage. TechConnect's client, a Fortune 500 consumer goods company, seeks innovative new packaging technologies or materials solutions to protect their confectionary products from common insect pests while in storage or retail environments.

Currently, the client utilizes metalized biaxially-oriented polypropylene (BOPP) based laminate materials as a primary wrapper for the individual units of confectionary goods. This material is generally effective and provides the desired shelf life for the products. However, if the product was stored improperly at any point during the supply chain, it can be susceptible to ingress by unwanted pests including grain borer beetles, red flour beetles, almond moths or other insects. The insects in question will chew their way through the packaging to consume the confectionary inside.

To maintain product quality in the marketplace, TechConnect's client is pursuing new packaging technologies which can effectively prevent this ingress including, but not limited to:

- Advancement to existing BOPP materials
- A New food-grade packaging materials
- A Novel barriers and coatings

All proposed materials must be:

- Safe for food contact per EU/US food safety regulations
- Ready for implementation within 12-18 months
- Suitable for ambient temperatures approaching 50°C / 122°F
- Protective against insect pests for up to nine months
- Recyclable
- Suitable for consumer-facing packaging

Approaches must also not negatively impact consumer perceptions or the organoleptic properties of the product.

Technologies which do not currently meet the above performance may still be considered if evidence of eventual alignment can be provided. Materials which are sustainably sourced are also highly desirable.

While approaches closer to commercialization are strongly preferred, the client may also consider earlier stage technologies with a viable pathway to commercialization. The client will also consider technologies originating from academia as well as those from corporate sources.

The goal of this sprint is to facilitate contact and interactions between the Sprint sponsor and commercial entities (including Start-ups) or technology developers or research organization/university in this space. Submissions from all viable subject matter experts are of interest including those from academia and commercial entities.

REQUIREMENTS

Solvers submitting an Entry are encouraged to highlight capabilities in their Submission that meet criteria including:

- Technology overview:
 - Performance
 - Operational lifespan
 - Thickness
 - Recyclability
 - Appearance & Texture
- Current regulatory status
- Availability of performance and/or trial test data
- Experience with food & beverage applications
- Commercialization timeline
- Technical maturity

BUSINESS OPPORTUNITY FOR SOLVERS

All complete and eligible Entries will be included in an exclusive Innovation Opportunity Report that will be presented to our client. Solvers with well-matched capabilities may be contacted directly by either TechConnect Ventures or the client to discuss potential partnership opportunities, including – but not limited to – demonstrations, consulting, contract research, licensing, and more. Top-rated Entries may also be invited to register or participate in an upcoming TechConnect Ventures event or pitch program.

PARTICIPATION RULES & GUIDELINES

Solvers are encouraged to review the [Rules](#) and [Guidelines](#) provided on the Sprint page for details about participation, including submission criteria, eligibility information, and more.

QUESTIONS? Contact challenge@techconnectventures.com