

YOUR INPUT IS NEEDED! - LEAVE YOUR REACTION BUSINESS MODELS FOR NEW LARVICIDE FOR STORED GRAIN PROTECTION

United Experts Group, Belgium

Guide - How to Score Business Models

Participate in our survey on this poster!
Take a look at the shortlisted potential business model for the new larvicide developed in novIGrain and assess them taking into account **5 key criteria**

- 5 key criteria:**
- Quality of Value Proposition
 - Feasibility
 - Scalability
 - Innovativeness
 - Strategic Fit

- When scoring the models consider the following:**
- Does the business model bring value to the target market?
 - Does this model meet an urgent or underserved need?
 - How realistic is it to implement this model with current capabilities and resources?
 - Consider technical, regulatory, financial, and organisational barriers.
 - How easily can the model grow in size, geography, or customer base over time?
 - How novel, original, or disruptive is this model in the context of pest control and grain storage?
 - Does it introduce a new way of delivering value?
 - How well does the model align with the current grain protection industry?

Place sticker in the range from **very bad** to **very good**

	Bad	Average	Good
<p>Business Model 1 B2B Bundled Service Model (Large-Scale Buyers)</p> <p>This model is based on the idea that while the new IGR insecticide is safe and easy to apply, larger-scale clients — such as commercial grain storage companies, cooperatives, and industrial farms — often prefer integrated solutions that combine product delivery with application support, equipment access, and service continuity. The product is sold directly or via agri-distributors, typically in bulk quantities, and is bundled with value-added services such as leasing of application equipment, on-site staff training, and technical support. This reduces reliance on third-party applicators while ensuring correct and compliant use at scale. The IGR's safety profile makes internal application feasible, but structured support builds trust and mitigates operational risk. This model mirrors how large ag-input deals are managed today — through contracted supply, service bundling, and key account relationships. It is designed to secure repeat purchases, encourage loyalty, and align with the operating models of professional buyers. This model enables deeper market access in high-volume segments and builds long-term relationships, but it is less scalable than retail models due to the need for field support and longer sales cycles.</p>			
<p>Business Model 2 Online & Retail-Oriented Model (Small-to-Medium Buyers)</p> <p>This model is based on the idea that the new IGR insecticide is safe, easy to handle, and does not require licensed application, making it suitable for direct sale and self-application by small-to-medium-scale farmers or storage operators through online platforms and agricultural retailers. The product is sold via e-commerce channels, agri-retailers, and farmer cooperatives, and marketed as a "user-friendly pest control solution" that allows end users to treat their stored grain themselves without relying on external service providers. The IGR's favourable safety profile — such as low toxicity, no re-entry restrictions, and simple application requirements — enables this direct-to-user approach. Instructional materials (e.g., videos, labels, pictograms) are provided to ensure correct use. Optional remote support via helpline or chat, as well as digital resources such as mobile apps or WhatsApp tutorials, may be offered to improve confidence and compliance. This model mirrors how many fertilizers, herbicides, or biostimulants are sold today — as off-the-shelf solutions with user autonomy.</p>			
<p>Business Model 3 Direct Product Sale to Pest Control Operators</p> <p>In this model, the new insect growth regulator (IGR) insecticide is sold through conventional agricultural input channels — including pest control operators, agro-dealers, and agricultural distributors. These pest control operators are the key customers, and they are responsible for product storage, marketing, and application for end users such as farmers or grain storage operators. Pest controllers are already trusted by many farmers and grain storage managers, so the model builds on their role to handle the application of pest control treatments. The IGR is promoted as a safer, more sustainable, and residue-compliant alternative to traditional fumigants or contact insecticides. This business model relies on existing practices. It offers limited control over how the product is applied or positioned in the market. The company behind the IGR product may provide marketing and training support to pest controllers to ensure awareness and proper usage, but no additional services or structures are required.</p>			
<p>Business Model 4 Dual-Use Application Platform Model</p> <p>This model is based on the idea that introducing the new IGR insecticide (S-methoprene-based larvicide) can be accelerated by leveraging existing consumer habits — specifically, the widespread use of deltamethrin adulticides — through leasing model for dual-application equipment that simplifies adoption and integrates both products into a single workflow. The core offering is a dual-mode applicator, leased to end users, that enables precise application of both an adulticide (e.g., deltamethrin) and the new IGR in a single or sequential treatment. This technology lowers the barrier to adoption for the IGR by fitting into familiar practices, while offering enhanced efficacy through integrated pest lifecycle control. The product(s) are sold through retailers, cooperatives, and direct channels, but the key differentiator is the value of the bundled application system, which positions the IGR as an easy, compatible upgrade rather than a replacement. Instructional content, training, or optional support is provided to ensure proper dual use. This model encourages cross-sell and product pairing, increasing total product demand with minimal disruption to user behaviour. The leasing model lowers upfront cost and provides a platform for long-term customer engagement.</p>			
<p>Business Model 5 On-Demand ULV Equipment Leasing for Small-Scale Users</p> <p>This model enables proper ULV application of the IGR insecticide among small and medium-sized farms by offering portable, calibrated ULV sprayers through short-term, on-demand leasing. Equipment is accessed via cooperatives, agri-service providers, or rural platforms, removing the need for ownership or long-term sharing. The ULV units are designed for precise droplet size and dosing, tailored to the IGR's safety and efficacy profile. Instructions and calibration features are built in or digitally supported. The equipment is bundled with the insecticide, and leasing fees may be reduced through minimum purchase commitments or service contracts. This model addresses several key barriers. Most smallholders cannot afford their own ULV-capable equipment, and improper application compromises product performance. Pest treatments often require timely and accurate measures, which this model supports by providing access to tools without complex cooperative arrangements or ownership responsibilities. This model promotes broader adoption of IGR through safe, consistent ULV application, while reducing technical and financial barriers.</p>			
<p>Business Model 6 Rapid Detection and Customised Treatment via Lab Partnership</p> <p>This business model connects product use to scientific diagnosis and decision support, enhancing the precision and effectiveness of treatments. In this model, farmers or grain storage operators collect pest samples from their facilities using a simple field detection kit or guidance form. These samples are sent to a partner laboratory or university specializing in entomology and pest resistance monitoring. The lab conducts a rapid identification and analysis, determining the pest species, infestation stage, and environmental conditions. Based on this, a customized treatment recommendation is issued — including the dosage, timing, and IGR formulation suited to the specific infestation. The IGR product is then ordered or applied based on this recommendation. This could be handled by the product provider or a licensed pest controller. This model offers a data-driven, evidence-based approach that appeals to larger operators and high-value supply chains. It may also support monitoring of resistance development, compliance with regulations, and product stewardship.</p>			

← Curious what our experts think about these business models, take a look at our poster No. 2



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