EXECUTIVE SUMMARY

The pet food industry in Kansas has been a source of growth and is poised for additional growth in coming years. Kansas sits in the KC Animal Health Corridor, which includes several of the world’s largest pet food manufacturers, along with more than 300 companies and organizations involved in animal health and nutrition. Pet food sales from the businesses within the Corridor accounts for over half of the total U.S. pet food sales, and a significant portion of the total Kansas exports were animal and pet food exports. Proximity to pet food ingredients which are grown or produced in Kansas are a significant advantage for this region. Pet owners are a growing segment of the population, and the purchasing power in this demographic opens up great potential for this industry.

Although great opportunity exists, the industry also faces some challenges which could serve as a barrier to the kind of growth that is possible. Food safety regulations are increasing within the pet food industry and impact facilities, equipment, workforce and labeling. Several other federal policies impede efficiency in business as well. Distribution of product is a challenge, needing improved transportation infrastructure as well as storage options. Hiring and maintaining a workforce is difficult particularly in rural communities with a lack of housing.

Converting these opportunities into productive economic growth will require the development of a long-term growth strategy based on input from both public and private stakeholders in the pet food industry. Public outreach, both locally and internationally, could set Kansas up as the leader in pet food manufacturing. Education and government organizations can play a key role in promoting opportunities for innovation and expansion within new and existing businesses. Proactive efforts from key players in this sector can result in growth for the pet food industry in Kansas.
With the growing trend of pet ownership, the pet food industry, which includes dog and cat food along with food for birds, fish, reptiles, hamsters and other pets, is poised for additional growth. This business growth can develop into a larger market of value-added products from the resources available in Kansas. Two of the top five pet food companies own manufacturing operations in the state. According to estimates prepared by the Kansas Department of Agriculture and based on the Implan economic data model, the animal food industry in Kansas has a total direct output of approximately $4.9 billion and creates 3,533.7 jobs. The industry supports a total of 18,412.1 jobs and provides a total economic contribution of over $8.0 billion. The dog and cat food manufacturing industry alone employs 2,129.5 with a direct output of over $2.8 billion. The dog and cat food manufacturing industry supports 10,587.4 employees through indirect and induced impacts and creates a total economic contribution of approximately $4.6 billion.

Pet food manufacturers located within the KC Animal Health Corridor represent 61 percent of the total pet food sold in the United States. Founded in 2006 and anchored by Manhattan, Kan., and Columbia, Mo., the Corridor comprises more than 300 companies and organizations involved in animal health and nutrition, including leading universities and research institutions. Also located in this region are several facilities of some of the United States' and the world's largest pet food manufacturers. These Corridor pet food manufacturing companies also account for 49 percent of global pet food sales.

According to the Euromonitor International data available at the end of 2014, global dog and cat food sales alone amounted to about $79 billion. In Kansas, animal and pet food exports were at 9.7 percent of total pet food production which equates to $403 million and ranks this category 4th in state exports.

The 61 percent of U.S. pet food sales cited by the Corridor amounts to just over $14 billion of the U.S. total of $23 billion, which corresponds to data from the American Pet Products Association (APPA). Companies with a business location within the Corridor represent 56 percent of the total animal health, diagnostics and pet food sales, which totals almost $50 billion in sales (total global sales = $88.2 billion). Companies located within the Corridor represent 67 percent of the total animal health, diagnostics and pet food sold in the United States, totaling $21.5 billion in sales (total U.S. sales = $32 billion).

Data from research firm GfK shows 51.6 percent of all U.S. households own a dog or cat. Among millennial households, the percentage rises to 57 percent with another 20 percent reporting they intend to get a dog or cat. Also, 10 percent of U.S. pet owners are new to ownership, equating to nearly 8 million new pet owners within the last year, the majority of which are millennials.

In addition, many other players in pet food fall outside the “animal health and nutrition” mission of the Corridor but are important pieces of our vibrant industry. These include equipment manufacturers, processing support organizations, testing and lab services. The Corridor website lists hundreds of similar organizations by category, its “service provider” members. This industry employs nearly 20,000 people with approximately 3,000 of these jobs in Kansas.
In order to develop a strategic growth plan for the pet food industry, it is important to understand the areas where Kansas has a comparative advantage and the best opportunities for growth or expansion.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Implications for Growth and Development Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital of the Pet Food Industry</td>
<td>No state or region has proclaimed itself as the pet food capital. Kansas could present itself in recruitment efforts as the key player in the pet food industry.</td>
</tr>
<tr>
<td>Export Infrastructure</td>
<td>Maintaining and improving export infrastructure will help ensure demand for Kansas pet food products around the world. Good roads for trucks and plenty of rail access across the state along with a state-of-the-art intermodal facility are key to a strong export infrastructure along with a central location in the United States.</td>
</tr>
<tr>
<td>Ingredient Sources</td>
<td>Pet food uses sorghum, animal renderings, other grains or grain by-products grown or produced in Kansas. Meat is the number one ingredient in premium dog and cat food. Manufacturers note the importance of processing facilities located near the ingredient supply.</td>
</tr>
<tr>
<td>KC Animal Health Corridor</td>
<td>There is room for growth as other animal health companies locate to the KC Animal Health Corridor that stretches from Manhattan, Kan., to Columbia, Mo.</td>
</tr>
<tr>
<td>Policy Environment</td>
<td>Recent changes to the Kansas tax code have reduced state tax burdens on the Kansas agricultural community. Some of the key changes include a state income tax exemption for partnerships, LLCs, Limited Liability Partnerships, Sole Proprietorships and Subchapter-S Corporations and a sales tax exemption for farm machinery and equipment and various ag-based inputs. These state tax code provisions make Kansas a more attractive state for growth or expansion. Kansas tax policy is a benefit to the innovator and entrepreneur because removing state income tax from the cost equation reduces the risk of proceeding with a project. At the federal level, Kansas is fortunate to have elected members of Congress who strongly support the agriculture industry. The Kansas congressional delegation will play an important role in influencing positive changes related to federal regulations or legislation, including a national traceability system, international trade, federal taxes, transportation rules, natural resources and more.</td>
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OPPORTUNITIES (cont’d)

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<thead>
<tr>
<th>Factor</th>
<th>Implications for Growth and Development Opportunities</th>
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<tbody>
<tr>
<td>Regulatory Compliance</td>
<td>With the innovations at Kansas State University in pet food safety, Kansas is a leader in regulatory compliance and providing a safe, wholesome product. Many existing pet food manufacturing facilities will be unable to comply with the Food Safety Modernization Act’s changes to manufacturing regulations in the next 3-5 years. There is a huge opportunity to attract replacement capacity to Kansas. Some estimates suggest the opportunity of 15 additional plants in Kansas in the next 5-8 years.</td>
</tr>
<tr>
<td>Supporting Institutional Infrastructure</td>
<td>K-State University and KDA house expertise to guide processors looking to get started or expand in Kansas. They can help businesses be successful in the regulatory environment as well as offer some unique start-up and marketing assistance. Having both grain processing and large animal expertise at K-State is an important part of being the pet food capital.</td>
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SUCCESS STORIES

- K-State Pet Food Program Strategy Planning group gathered representatives from the industry, K-State, KDA and economic development and decided to host the Pet Food Experience workshop in Manhattan again since the first one was well attended.
- The Petfood Forum relocated to Kansas City from Chicago; the relocation was received with enthusiasm and the event will be held in Kansas City for the next four years.
- The KDA ag marketing division secured a STEP grant to include a trade mission trip to Pet Food Forum–Asia. The department took two Kansas pet food industry companies to the forum and the VICTAM trade show in late March.
- The pet food curriculum has become a separate area of focus within the K-State grain science program allowing students to learn to work specifically in the pet food business.

CHALLENGES

While Kansas is poised for major expansion in the pet food sector, the following factors represent challenges serving as barriers to achieving the objective of the strategic growth plan.

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Details of Challenge</th>
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<tbody>
<tr>
<td>Consultants</td>
<td>Much of the work done in economic development around where companies choose to locate or expand is managed by consultants. Kansas needs to have more proactive interaction with the major consulting firms across the country so that Kansas is always on their minds for possible locations.</td>
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<tr>
<td>Challenge</td>
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<tr>
<td>Consumers</td>
<td>The fastest growing segment of pet food is “grain-free” which is not so good for a major grain-producing state like Kansas. This trend is linked to misperceptions about inflammation and dermatitis issues in pets being caused by grain.</td>
</tr>
</tbody>
</table>
| Critical Infrastructure    | Transportation infrastructure is critical for pet food processing. Access to processing facilities with roads that can handle tractor trailers and access to rail for receiving raw commodities is important.  
A lack of adequate housing in rural areas compounds the issue of a shortage of agricultural workers. Communities need to clean up houses and/or neighborhoods which are in poor condition and explore some spec home construction to offer to prospective employees. The state and federal government don't help the issue by subsidizing low-income housing in rural communities. |
| Distribution               | Pets are where the people are — the largest consumer base is on the coasts and around other major urban centers which also means most of the product has to be shipped long distances if it's made in Kansas.  
Many small manufacturers of pet food need a warehouse and distribution facility but aren't big enough make it work. A facility that could do this work for several small companies is needed particularly in serving the Kansas City market or housing for shipment from the Kansas City area. |
<p>| Education of the Scope of the Industry | There is a lack of awareness that the pet food industry focuses on all companion animal type pets (birds, fish, reptiles, hamsters, etc.) and not just on cats and dogs. |
| International Trade        | More work is needed to gain market access for Kansas pet food products around the world in terms of awareness, trade policy and shipping. Companies do not think of Kansas as a place to move their business. We need to market the state as the pet food hub for national and international companies. International buyers need to think of Kansas first when they are looking to source product. Passage of the Trans-Pacific Partnership could affect trade with some regions. |</p>
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<thead>
<tr>
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<tbody>
<tr>
<td>Microbiological Testing</td>
<td>There is no private lab in Kansas where pet food manufacturers can have their products tested for micro concerns such as salmonella. This is important for smaller operations that may not have the production to justify their own laboratory as well as for outside confirmation of internal testing.</td>
</tr>
</tbody>
</table>
| Policy                    | The increasing food safety regulatory environment has placed an additional burden on pet food manufacturers to implement processes, including upgrading equipment, sampling product, documenting activities and hiring additional employees to complete all of this work.  

The U.S. has an antiquated view of poultry meal and poultry by-products as the only country in the world with split definitions. Other species don't have split definitions.  

Though not unique to Kansas, there exist significant challenges due to federal laws and regulations, including: Waters of the U.S., the Endangered Species Act, burdensome Occupational Safety and Health Administration regulations and more.  

Inconsistent labeling requirements, licensing requirements, etc. exist from state to state. Pet food is a national and international business making consistent requirements very important to streamlined operations.  

Corporate farming laws in Kansas make it difficult for poultry production and poultry is a major meat ingredient in pet food. |
| Supply Chain              | From an ingredient-sourcing perspective it is difficult to get ingredients such as rabbit, venison, duck, potatoes, sweet potatoes and field peas all of which are popular in formulations today. This could potentially drive production to the west coast to be closer to these ingredients and the large population base. |
| Workforce Development     | Pet food manufacturers, similar to other agricultural companies, face challenges finding and hiring qualified candidates.  

In the pet food industry, it is often more challenging to find employees who are willing to work in manufacturing rather than finding employees with a specific level of education. Hiring and maintaining a work force particularly in the rural communities is a challenge.  

The educational system and current culture focuses heavily on preparing high school students for college, and undervalues the opportunities available in technical careers for students with a strong work ethic. |
The development of a long-term growth strategy will require input and discussion among key partners. The following strategies have been identified as next steps in developing a strategic growth plan for the pet food industry.

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Solution</th>
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<tbody>
<tr>
<td>Incubation</td>
<td>As more and more small companies start up, Kansas would benefit from development of an incubator with equipment, expertise and venture capital at K-State to support these start-ups.</td>
</tr>
<tr>
<td>Industry Organization</td>
<td>Work with industry and K-State to facilitate a discussion regarding the development of an industry organization. Regular participation in industry activities by several pet food manufacturers suggests that the critical mass necessary to form an organization may exist.</td>
</tr>
<tr>
<td>Industry Outreach</td>
<td>KDA will identify potential partners and establish a schedule for strategic growth plan meetings. KDA will also proactively reach out to key industry leaders and major manufacturers in Kansas regarding the development of a strategic growth plan. Specifically, make connections with the Pet Food Institute. KDA will dedicate staff time to encourage growth in pet food manufacturing within the state. Staff will work with industry consultants to gather more information on the needs of companies or to see how KDA can work with companies to better serve those needs.</td>
</tr>
<tr>
<td>Pre-Selected Sites</td>
<td>Proactively determine specific locations that have all the features important to pet food processors, to attract additional processors to Kansas.</td>
</tr>
<tr>
<td>Public Outreach and Education</td>
<td>Work with industry to develop and implement a public education campaign focused on promoting Kansas as the pet food capital of the world. Have a booth at Pet Food Forum or sponsor a breakout session.</td>
</tr>
<tr>
<td>Quality Certification</td>
<td>Develop an HACCP and pet food safety training or a joint certification program between K-State and KDA. This would provide a needed service to Kansas pet food companies as well as draw industry employees to Kansas from across the country and potentially around the world.</td>
</tr>
<tr>
<td>State Requirements</td>
<td>Kansas could take the lead in working with other states to make labeling and licensing for pet food more consistent using AAFCO and NASDA connections as a spring board.</td>
</tr>
</tbody>
</table>
OPPORTUNITIES TO EXPAND PRESENCE

Initial list of potential opportunities:

- Establish more companies in the animal health corridor on the Kansas side; target 2-4 new companies.
- Expand existing companies in Kansas.
- Assist companies in identifying and servicing export markets.
- Grow the pet food program at K-State and help with placement for internships and full-time jobs for those graduates.
- Establish an industry certificate for compliance education from K-State or KDA.
- Attract a co-packing facility to Kansas. There is huge demand for non-brand production to accommodate small recipe developers that can't afford a processing plant.
- Figure out how to be a good supplier of ancient grains such as quinoa, spelt, kamut, etc. The supply chain is not set up for it currently.
- Companies that supply bolt-on resources like marketing, quality control and food safety operations are needed so that small manufacturers don't have to develop all this expertise in-house.

OBJECTIVE

Based on feedback and information gathered from stakeholders and key partners at the Agricultural Growth Summit in August 2016, specific growth objectives for the Kansas pet food industry will be developed.
MEETING SUMMARY
From April to July 2016, Kansas Department of Agriculture executive and agricultural marketing team members met with pet food industry members. Individuals identified for the one-on-one conversations represented both small and large companies and ranged in geography throughout the state. Many expressed that access to ingredients for pet food manufacturing, the central location, and being in the animal health corridor make Kansas a good place to grow. Common themes of challenges impacting the growth of the pet food industry included lack of skilled workforce and potential financial challenges in the years to come.

Consumer
- Need to be ready for next five years of demand
- Consumer-influenced manufacturing will grow
- Raw materials could be a limitation or an opportunity (not many new products being made with wheat or beef — have the opportunity to get more, but have to work on consumer concerns)

Finance and Capital
- Need for an incubator with equipment, expertise, venture capital at K-State to support the small companies that start up
- For expansion to happen, capital investments need to bring in equipment (incentives will be important to make this work)

Research
- K-State pet food program is a great benefit and there are very few programs out there like it
- Having large animal and grain processing expertise is a huge benefit for pet food
- Hundreds of documents on pet food, but very few have been published
- Engineered ingredients is a growing market and a great way to add value (Kansas should be able to excel in this sector)
- It was mentioned several times that Kansas needs to be the “Raleigh Research Triangle” solution for pet food
- Equipment design is important for food safety (easy to clean, no micro harborages)

Rules & Regulations
- Kansas is good to work with, but needs to take the lead on consistent policy making
- Regulations are a primary concern — both pet food and large animal feeds
• Need to get new products (ingredients) approved faster and states need a consistent plan or policy (ingredient specific, antibiotic replacements)
• Pass TPP (people need to understand the benefits of trade to the pet food industry)
• Need to eliminate antiquated definition of poultry meal and poultry by-product (need to work with AAFCO to get it fixed)
• Need separate policies for food and feed
  o AFIA is working to get definition split at the federal level: need Kansas to support this and build coalition with other states
• Labeling is not clear and defined; there is no consistency in policies from state to state — this is a primary issue (they are left for interpretation for things like organic, natural, non-GMO, etc.)
• Government sampling is an issue — should come from the manufacturing plant as opposed to retail because the product can be held rather than have a potential recall
• FSMA and internet have a huge impact (internet moves information quickly whether it is true or not)
• Need quick sample turnaround because holding product creates warehouse bottleneck
• Corporate farming laws prohibit poultry in Kansas; chicken is one of the largest ingredients in pet food and U.S. benefits if it can be sourced locally
• Kansas income tax policy is very helpful
• The state is not a roadblock, but could help put some of the resources in place and help be a connector

**Transportation and Infrastructure**
• Good distribution rates in the state
• Greater consolidation of companies (companies will fall out or close when they do not meet safety standards)
• Need to work on getting ingredient manufacturers to come to Kansas
  o Proximity to getting ingredients is a major concern
  o Kansas needs to be business-friendly
• Sites need to be accessible by rail and trucks
• Kansas is a great source of raw materials
• Economic activity needs to be spread across the entire state (less focus on city hubs and be more regional in nature)
• A lab closer than FDA in Denver would be beneficial for faster turnarounds — need a private lab in Topeka
• Need for distribution center since a lot of the product goes to K.C. (small manufacturers don’t have dedicated distribution centers)
• The lack of clarity between the city of Manhattan and K-State in terms of economic development is challenging; consultants are missing knowledge of technology, recipe creation, ingredient suppliers and logistics
• Need co-packing facility for those companies that can’t fill a facility on their own
• Savings of being in the pet food corridor exceed opportunities of other locations
• Pre-selected sites would be very beneficial
  o Potential to build a “spec plant” and pet food industry companies will come
Workforce and Quality of Life

- Employee training is the number one food safety focus (with continuous monthly training)
- Need for affordable housing (state is not helping by subsidizing low income housing in rural areas)
- Shortage of independent contractors to work in the area is a challenge
- Difficult to attract interest in workforce (no status in pet food)
- Over-emphasis in university education at the high school level is a concern
  - Training students at high school level would be beneficial
- Quality workforce is a concern, especially with soft skills

Other

- Growth being dependent on other sectors is challenging
- Sees the need for Kansas to become part of the other associations to see what the needs are to put together another group (this grassroots organization is on the list of goals for the pet food program or initiative that K-State is overseeing, work with AFIA?)
- Petfood Forum in KC is a positive
- There is a shortage of alternative ingredients (i.e. rabbit, duck, venison, potatoes, sweet potatoes, field peas)
- Value-added or further processed products are needed instead of shipping out raw commodities
- Unified Government of Wyandotte County has been great to work with

Potential Action Items

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