

Industry 4.0 in the Retail Sector: Sustainability of Food Retail with a

Focus on Food Insecurity in Dayton, OH

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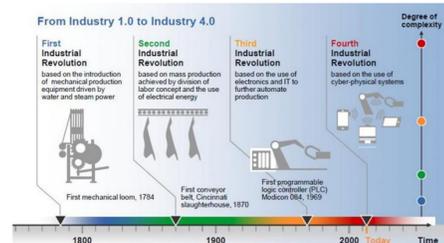
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Introduction

- What is Industry 4.0?
- The fourth wave of the Industrial Revolution
- Everything is becoming completely revolved around the internet
- Increase in efficiency
- Decrease in time and cost



- Food Desert
- No access to food in specific areas and neighborhoods
- The result of the change market trends that demand larger stores
- Shifts in population density over the last several decades
- Food Apartheid
- Food is in the area (at dollar stores, corner shops, etc.), but there is no access to healthy & nutritious food as there is in other areas
- Is systematic because grocery stores pick specific areas to build based on socioeconomic status

- A Focus on Dayton, OH
- At least 4 grocery stores closed in 2019
- Dayton was already defined as a food desert/apartheid before the closures in 2019, so what now?

LOCAL NEWS
Northridge Kroger set to close, 3rd grocery store to close in recent weeks



Methodology

- Fieldwork by volunteering at Gem City Market (GCM), a co-op full-service grocery store being built in a food apartheid in Dayton

Results Obtained

- “A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise.” - International Co-operative Alliance
- Goal of GCM: to create a community and customer-driven full service grocery store and deli in a neighborhood where there wasn't a local grocer



Significance and Interpretation of Results

- Three Potential Ideas to Help Combat Food Insecurity
- **Co-ops**
- Community Run Grocery Stores
- **Mobile Markets**
- Food truck that you can shop at
- Healthy foods at a good quality not normally found in the areas it stops at
- Accepts all forms of payment- including EBT
- Pays employees, sells product at affordable rate
- Downfall: hard to have extremely low prices due to not buying large quantities, but this could change with growth
- **CSA Groups**
- Mission of Mary Farm
- Nonprofit in Dayton founded by lay Marianists
- Focus on the issue of produce accessibility for those in lower income areas
- Gives Community Supported Agriculture (CSA) members fresh produce at an extremely low cost

