

# Thesis report: Executive summary

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*Uniform product coding in the floricultural sector;*

*Barriers and opportunities for the Global Trade Item Number (GTIN)*

Title:

Uniform product coding in the floricultural sector; Barriers and opportunities for the Global Trade Item Number (GTIN)

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## Executive summary

### Introduction

The floricultural sector in the Netherlands is a high level industry as it plays a leading role in floriculture trade in Europe. The sector has a large impact on the Dutch economy; it is the largest fresh product exporter in Europe and the third largest exporter in the world. Developments such as increased virtualization, new established markets and increasing demands from end-consumers will stimulate the sector to become a floricultural network and to become more virtualized. To become more virtualized, the need for a uniform standard for product coding is identified as one of the challenges. A lack of uniform product coding in the floricultural sector was identified some time ago. The complexity of the sector has resulted in several conflicting standards for product coding, for example the VBN coding standard and 'Codering Levend Groen'. Also many actors use their own codes, which mean that actors use a product identification number (or text) mainly for their internal processes, and sometimes communication about a product is also done using that code. In the end the need for a standard product coding system is clear, but the introduction and implementation of a standard product code is lacking.

The research objective is first to identify the need for a product coding standard according to actors in Dutch floricultural retail chains. When positive the second objective is to identify the possibilities to stimulate adoption of a standard for product coding. This results in the research question:

*What is the need for a universal product coding standard in the Dutch floricultural retail chains and what are the possible ways to stimulate adoption?*

The sub-questions are:

- Which possible standards are available and useful as standard for uniform product coding in the Dutch floricultural retail chains?
- What role can uniform product coding play in supply chain management of the Dutch floricultural retail chains?
- What is the current state of affairs regarding product coding in the Dutch floricultural retail chains?
- What are the drivers and barriers of implementing uniform product coding in Dutch floricultural retail chains?

### Methods

The methods for this research involve a literature study and 13 in depth interviews with actors active in Dutch floricultural retail chains. The literature study is used to identify the role of product coding in supply chain management and information sharing. Also the desk research is used to identify and describe the theory on adoption, based on literature. The insights from

the desk research are further used to set up a questionnaire for the interviews. The questionnaire is used to interview five growers, four traders (importers and exporters) and four retailers.

## **Conclusions and recommendations**

The results of the interviews provide sufficient insights in order to answer the research question. As the interviews show, there is a need for improvement of product coding in the sector, to come to one uniform standard for product coding. Over 75 percent of the participants are dissatisfied with current situation and more than 90 percent of the participants see opportunities for improvement. From the standard currently available, Codering Levend Groen (CLG) and the Global Trade Item Number (GTIN) are useful in floricultural retail chains. Both are useful, because GTIN plays an important role within retail stores. The need for a uniform product coding standard is present, because of the role product coding plays in supply chain management within the sector. Product coding is responsible to standardize communication about products in the chain, to be able to make full use of information sharing.

To be able to identify the possible ways to stimulate adoption, the drivers and barriers for the adoption of a uniform product coding standard are identified. The drivers are important aspects to maintain in order to stimulate adoption. Participants are dissatisfied with the current situation and many problems can be solved by introducing and implementing a standard for product coding in floricultural retail chains. Also, companies need good product coding to improve their business and increase efficiency and have more market information available.

The barriers are important aspects to remove in order to stimulate adoption. The complexity of floricultural products and the complexity of floricultural chains are identified as important barriers. Floricultural products can have many variations, which can lead to complicated situations leading to an enormous amount of new product codes. The chain is complex because every company has to work together with different chain partners, with different ways of communicating and coding. Furthermore insufficient available knowledge about product coding standards, such as the GTIN, is identified as barriers. At last, information sharing and doing digital business is insufficient in the sector, an important barrier for a uniform product coding standard. In the recommendations, the possibilities to remove the barriers are discussed:

*Barrier 1: The complexity of floricultural products is a barrier for the implementation of a uniform product coding standard.*

The anxiety for an overload of GTIN's in their system is often mentioned by retailers. Next to this, retailers are also afraid that their suppliers do not code the product in the right way. Therefore it is recommended that Floricode and GS1 discuss these assumptions with retailers.

The goal of such a discussion is to find out where the assumptions come from and to think of possible solutions to solve it.

*Barrier 2: The complexity of the chains is a barrier for the implementation of a uniform product coding standard.*

As the complexity makes it difficult for companies to start with uniform product coding, it is important for Floricode and GS1 to make sure that the focus is on specific chains where GTIN has value for the participants. Such a chain can be from a growers association to a retailer, where the growers association supplies floricultural products to the retailer. In such chains, participants can make clear agreements about product coding, and sharing of information. This way it is possible to show the advantages of using GTIN to companies.

*Barrier 3: Information sharing between companies is at a basic level.*

To overcome this barrier, Floricode and GS1 should focus on communicating the advantages of GTIN in combination with a high level of information sharing, while only then advantages for GTIN can be optimal.

*Barrier 4: The level of digital business is not sufficient.*

It is important for Floricode to keep the focus on automation in the sector and to stimulate this. A high level of automation can act as driver for adoption. It can act as an incentive to improve information sharing between companies and from there it can give companies the opportunities to make optimal use of GTIN.

*Barrier 5: No clear promotion of a uniform product coding standard can be identified.*

It is recommended to improve the communication about standards on product coding. Next to this, it is important that companies know which organizations they have to contact if they need more information or have questions about product coding. In promoting, the help of an influential organization such as Flora Holland can also be important.