Golden Island®

Beehive products from Malta

Empowering micro-enterprises through ICT

MCA 6th eCommerce Forum,
30th March 2011
The Westin Dragonara Resort

A case study

Honey and More

Ross Street

St Julians STJ 3242

Golden Island Ltd.

- SME set up in April 2008
- Two full time human employees (besides a few hundred thousand worker bees)

What we do…….

- Producers of beeswax candles, flavoured honeys, infused honeys with herbs and spices, as well as honeys with dried fruits and nuts,

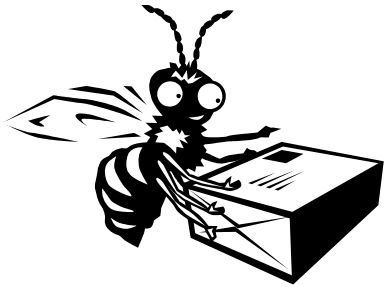
- Also produces other traditional gourmet products from carob, salt, herbs, jams and marmalade.

Out in the open….

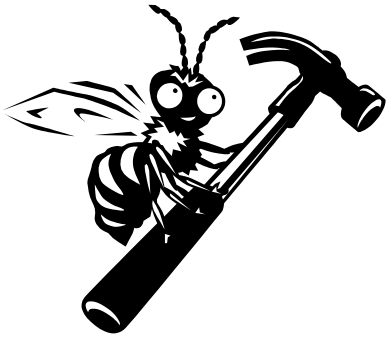
Golden Island Ltd. manages a growing number of small apiaries all over Malta for the production of quality Maltese honey and other beehive products.

Where our products are found…….

- Distributes to a number of retail outlets directed to local and tourist trade
- Has started to explore overseas gourmet markets and been able to start exporting to Belgium and Germany on a regular basis



ICT setup



Honey and more
Point of sales

Server at Mosta
Office

Invoicing
Stock Control
Accounts

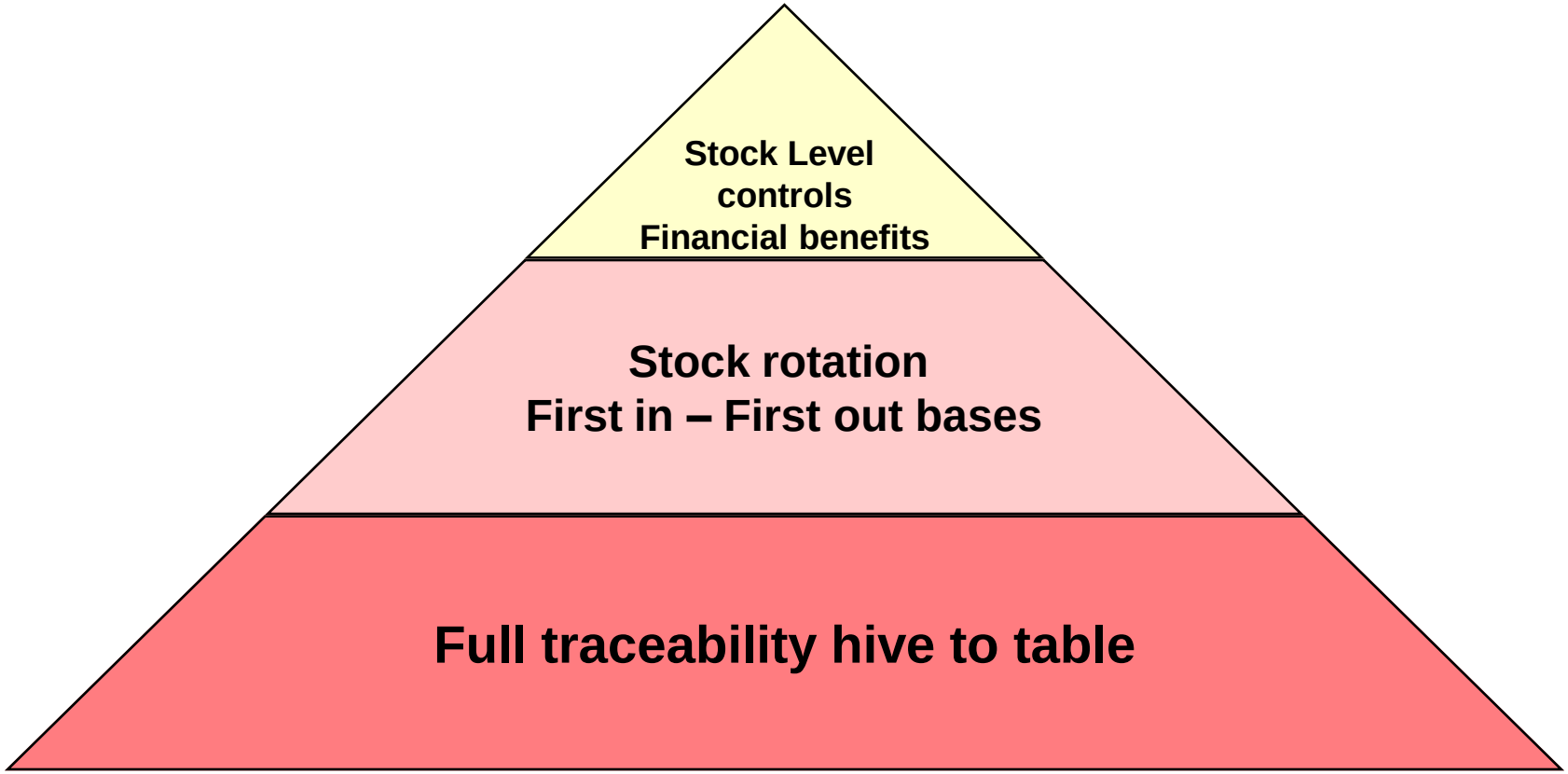
Home
Remote Desktop

Apiaries
Data Transfer
remote monitoring

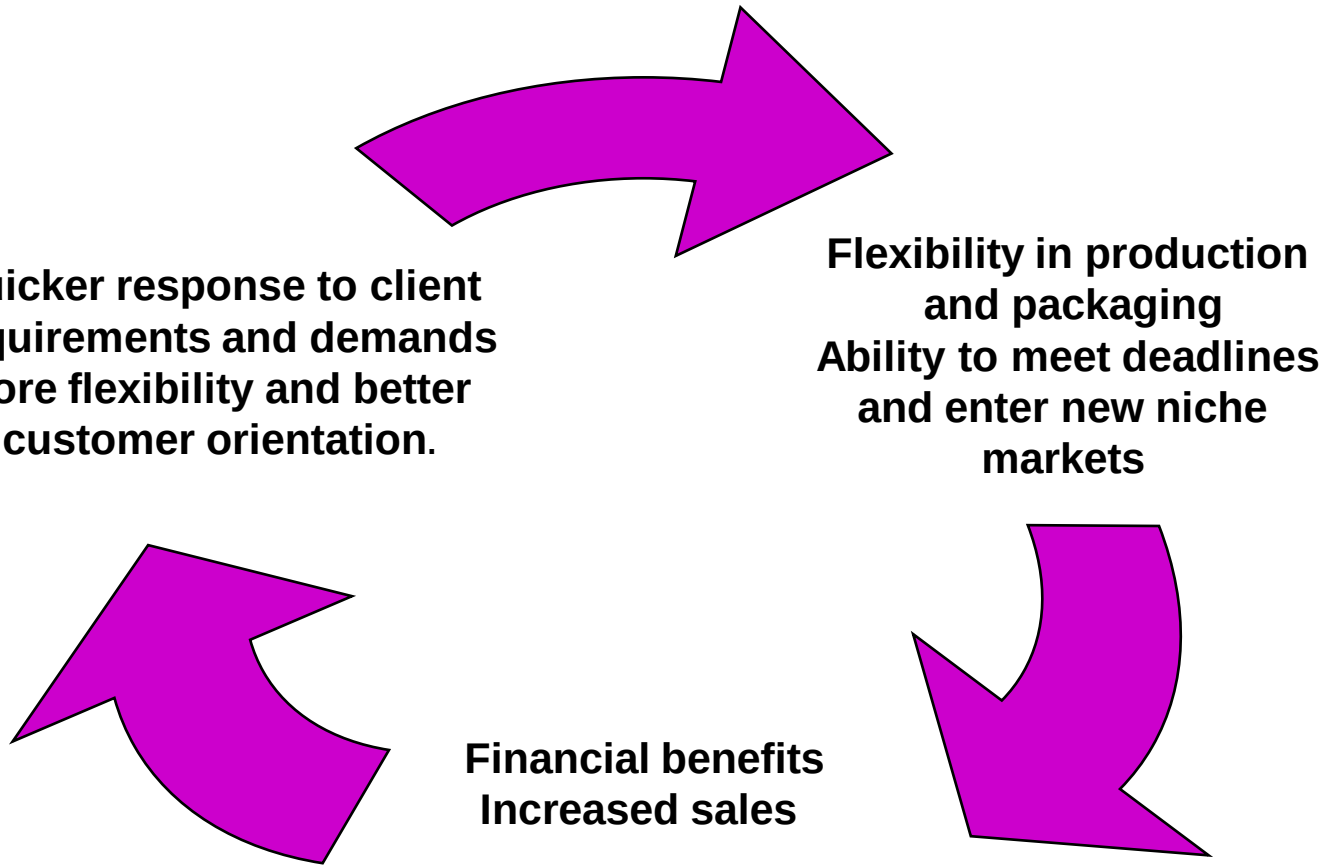
Communication

- Main communication between shop and office/warehouse typically via email and/or Skype,
- Orders from local clients mainly collected during client sales visits,
- Overseas clients communication via email/Skype, orders received via email,
- Internet banking

Stock Control Benefits



Benefits from ICT setup



Research & Innovation Project

We are currently in the preparatory stages of commencing a research project for the authentication of Maltese honey together with the University of Malta, Rural Sciences and Food Systems.

This research project is being funded by the Malta Council of Science and Technology (MCST), through the National Research and Innovation Programme R&I 2010.

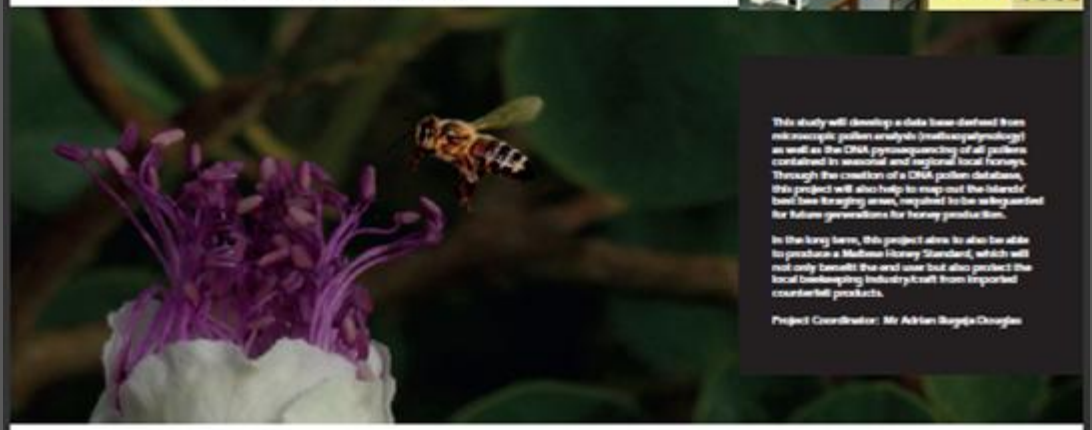
Molecular Characterization of Maltese Honey

Malta; known to the ancient Greeks and Romans as Melite, which derives from the Greek word melli meaning honey, has long been associated with beekeeping and honey production, since the times of the Phoenicians, who started by domesticating wild swarms using earthenware jars, still found today in some Punic apiaries (Mqabbar). Today after millennia, Maltese honey still remains a well sought and prized gourmet product. All this despite, the extensive development of key foraging countryside (garrigue) and the introduction of disease which has greatly diminished the unique Maltese honey bee sub specie (Apis Mellifera Ruttneri).

A research project proposal between the Division of Rural Sciences and Food Systems and Golden Island Ltd. has been granted funding by the Malta Council of Science and Technology (MCST), through the National Research and Innovation Programme. This research project will analyse in detail the physicochemical characteristics of Maltese Honey following international recognized standard techniques and also its floral origin. This project will be the first in-depth study of the local honey and forms the basis to authenticate it.

The physicochemical characteristics that will be studied are colour designation, sugar content, moisture content, electrical conductivity, free acid, enzyme activity, and HMF (hydroxymethylfurfal) content. The floral origin of the Maltese honey will be studied in depth for the first time. Honey samples will be examined by microscopic techniques (melissopalynology) to analyse the pollen content.

Novel bio-molecular techniques will be applied to study the floral origin of honey. Honey samples will have their pollen DNA extracted, and a common region of all the different flora pollen DNA will be sequence contemporarily. This technique known as pyrosequencing will give a clear picture not only of the floral origin but also the percentage of the different floral found in the local honey.



This study will develop a data base derived from microscopic pollen analysis (melissopalynology) as well as the DNA pyrosequencing of all pollens contained in seasonal and regional local honeys. Through the creation of a DNA pollen database, this project will also help to map out the islands' best bee foraging areas, required to be safeguarded for future generations for honey production.

In the long term, this project aims to also be able to produce a Maltese Honey Standard, which will not only benefit the end user but also protect the local beekeeping industry/craft from imported counterfeit products.

Project Coordinator: Mr Adrian Bugeja Douglas

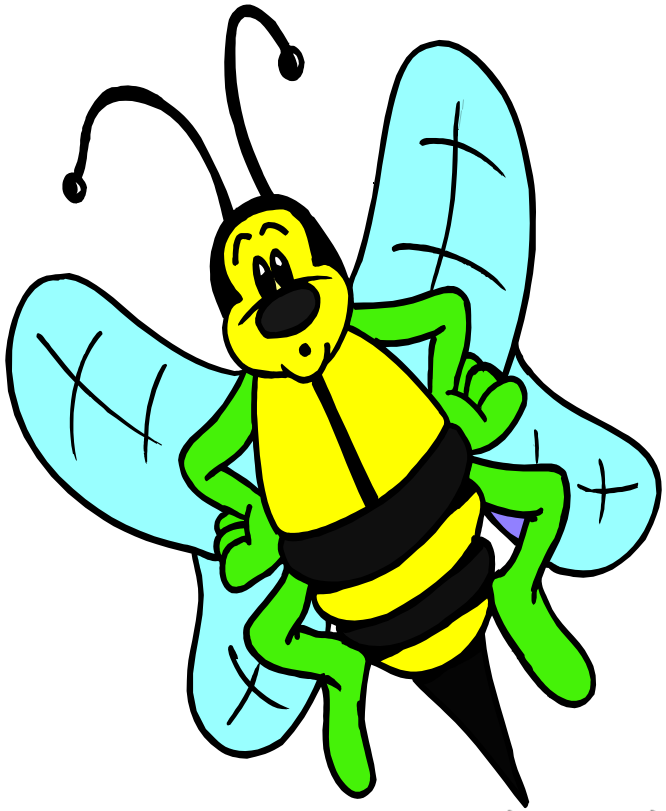
UNIVERSITY OF MALTA
L-Università ta' Malta

Golden Island

MCST Malta Council for Science & Technology

ICT at the apiaries

- Simultaneous remote monitoring of apiaries via sms
- Logged data from hives to be used in a research project on Maltese honey authentication.



Thank you for your attention