# Business Rules

With the development of fisheries, overfishing has many areas of marine ecosystems produce a significant impact. These not only cover environmental trends and global advocacy contrary, but also for a particular region of the fishery, the quality and sustainability will also have adverse effects.

In order to allow more fishing suppliers and customers clearer obtain such information, to ensure the quality of fish and fishery long-term development requirements, a fishing and trading gather feedback system came into being.

This system is to build up a platform for fish professors got a chance to look at most recent fish transactions. Then they can have more data to analyze ecological environment. By the way provided by this platform, the information impacting suppliers and customers. In some case, due to internal information channels of fishery, some issues (i.e. plague) can also be parsed to the customer/supplier, so that more serious impact can be prevented.

**Attention:**

**Fishery** – is not only a type of fish, but a type in a specific sea area. Different place of origin will be treat as different product unit. Like hairtail, it’s not that like to happen that hairtail all over the world was in a plague. Even much less possibility that hairtail is overfishing anywhere. In most case, the situation will only occur in a specific type of fish within an sea area.

* (This concept applies on the rest of this document)

There are 3 types of User roles available on their application and they are as follows:

1. **Customer** – Like KFC, Carrefour, needs purchase channel.

2. **Supplier** – Supply fishes to customers – fishing ground.

3. **Professor** – Provide advice and health level to Customer/Supplier.

**Supplier**, who supplies fishes to customer, is responsible for get the transaction records input into the system. The professor will provide some grading and advice onto the system, so that suppliers can get the summary and detail information of the healthy grading for all fisheries he sell.

## #1: Data entry

Supplier will enter transaction records. With following information:

* Customer
* Category – Salmon, Tuna, Hairtail ……
* Fishery
* Date – Date of this transaction input
* Amount
* Period – express the amount is with how many days, a month, a quarter or a year.

For suppliers who have internal process and come out with existed report, system support importing transaction data from spreadsheet.

Example data - Hokkaido fishing Co. Ltd.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | **Fishery** | **Customer** | **Amount** | **Date** | **Period** |
| Salmon | Caribbean Salmon | Carrefour | 50000(t) | 2012-3 | 2012 - Q1 |
| Salmon | Hokkaido Salmon | McDonald | 30000(t) | 2012-3 | 2012 - H1 |
| Tuna | Mediterranean Tuna | McDonald | 68000(t) | 2012-3 | 2012 |

## #2: Reporting

Supplier can get a report from what he input.

* Detail information – for all records
* Summary – by total amount
* Summary – by fishery

As a short-term benefit for the suppliers who has existing IT system on transaction recording, it can be a way of verifying the input.

For longer-term, we’d like to advertise the system to serve more burgeoning supplier’s IT requirement.

## #3: Professional advices

There will be a UI (as a message center) showing advices from the system

* List of advices related to the highest fishery in entered transactions
  + Scenario 1: Salmon in Mediterranean has a potential risk of plagues. Professors Mark Mediterranean Salmon as High risk, and due to my top transaction is Mediterranean Salmon, this message is very useful for me. So that it popped up at the top of my message center.
  + Scenario 2: Tuna in Caribbean was oversea during this month. If suppliers continue to do that, the breeding will be a big problem. The risk is maybe supplier can only get 1/3 during the next month. So the risk of Caribbean tuna as my second top transactions, popped up at the 2nd top of my message center.
* List of advices specifically to “me”
  + Scenario: A professor found a specific supplier’s overfish is the root cause of an ecological environment issue. Then he will just send a message to this supplier, notifying him if he continues to do in that way, next year it will be very difficult to get enough productivity in that sea area.
* List of generic messages
  + Scenario: A professor found tropical fish is breeding much more than the other years. Not sure who will be interest to this information, but share as a useful note with everyone on the system.

Example data: A message list of Hokkaido fishing Co. Ltd.

|  |  |  |  |
| --- | --- | --- | --- |
| **Sender** | **Fishery** | **Content** | **Time** |
| Professor1 | Caribbean Salmon | --- Caribbean Salmon : **High Risk** ---  Caribbean Salmon is in a potential plague, I’d suggest you to take an exam of what you got from Jan to Feb 2012. | 2.23 |
| Professor2 | Hokkaido Tuna | Hokkaido FG: Due to the significant decrease of Hokkaido Tuna, we ‘d suggest to control your fishing to keep a sustainable business | 3.18 |
| System Pr |  | Please pay attention to the breeding season of Sardine and Hairtail in May. | 3.15 |
| Customer1 | Caribbean Salmon | Hokkaido FG: I was noticed the Caribbean Salmon is in a potential plague, can you get back to us when you have an exam result? Thanks. | 3.19 |

## Note: Row 1,2 and 3 shows the example of 3 types in the list above.

## Row 4 comes from *#Customer 3.4*

## #4: Dashboard

Healthy level summarization

* Bar chart of High Risk/Moderate Risk/Low Risk/Unknown
  + After I continuous input my transaction onto the system, I would like to understand, for all my fisheries, are say quite safe as the professors point of view? How many percent of my transactions is high risk?
* Popup detail information of each healthy level
  + I’d like to know the details about what being marked as high risk, or moderate risk.
* Linked to the related advices

**Customer**, who purchases fishes from supplier. He has the same information as the suppliers, which coming from the professor.

## #1: Reporting

Supplier can get a report from transactions what supplier inputs.

* Detail information – for all records
* Summary – by total amount
* Summary – by fishery

Second purpose of reporting for supplier, is also suitable for customers.

## #2: Professional advices

There will be a UI (as a message center) showing advices from the system

* List of advices related to the highest fishery in entered transactions
  + Scenario 1: I care very much about whether there are any potential plague for the fishery I bought.
  + Scenario 2: Some customers also care about whether a type of fishery can be continuous supplied. It related some of their marketing strategy.
* List of advices specifically to “me”
* List of generic advices

## #3: Dashboard

Healthy level summarization

* Bar chart of High Risk/Moderate Risk/Low Risk/Unknown
* Popup detail information of each healthy level
* Linked to the related advices
* For “Risk” ones, customer can sent message to supplier, ask for help on what he has supplied from them.

**Professor**, who provides health level and general / specified messages to supplier or customer.

## #1: Reporting & Dashboard

Professor can get a report from transactions what all supplier inputs.

* Support multiple search criteria
  + Period
  + Category
  + Fishery
  + Customer

It’s very important to let the professor get an overall report by all transactions. So that they can be more clear about what are fished over the world. Those data are very helpful for analyzing the risks and advices.

Example data: When professor search all “Salmon” transaction within 2012 - Q1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Fishery** | **Period** | **Amount** | **Detail** |
| Salmon | Caribbean Salmon | Jan 2012 | 721018(t) | Expand |
| Salmon | Caribbean Salmon | Feb 2012 | 703098(t) | Expand |
| Salmon | Caribbean Salmon | Mar 2012 | 490037(t) | Expand |
| Salmon | Mediterranean Salmon | Jan 2012 | 1982634(t) | Expand |
| Salmon | Hokkaido Salmon | Jan 2012 | 900273(t) | Expand |
| Salmon | South see Salmon | Jan 2012 | 4077645(t) | Expand |

## #2: Healthy level grading

Professor can grade fisheries

* Grading a fishery specifically to a year month
  + Most of the healthy status of a fishery is within a time period. (You should never say perch is terrible forever, it will be only not that good in a specific season)
* With related message for risk ones
  + When you grading a fishery with risks, there must be some evidence, facts, at least reference to some information. This is very important to customer / suppliers, otherwise only a grade can not make others take any actual action.
  + Some of the risks will only be cared about specific suppliers / customers. For example, a super market will not care about what fish can be sustainable supplied, but if a supplier is supplying it as his primary income, the breeding information will be very critical for him.

Here is what can this system bring social impact. Professor can grade fisheries, and also inject some concept of environment protection. Because environment is actually connected with the business of the fishing ground, by providing benefit of their business, it’s easier to let them know, what are the right things to do.

Example data: Professor is grading fisheries

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Jan | Feb | Mar | Apr | May | Jun |
| Caribbean Salmon | **High Risk** | **High Risk** | **Med Risk** | **Low Risk** | **Low Risk** | **Low Risk** |
| Mediterranean Salmon | **Low Risk** | **Low Risk** | **Low Risk** | **Med Risk** | **Med Risk** | **Low Risk** |
| Hokkaido Salmon | **Low Risk** | **Low Risk** | **High Risk** | **Med Risk** | **Low Risk** | **Low Risk** |
| South see Salmon | **Low Risk** | **Low Risk** | **High Risk** | **High Risk** | **High Risk** | **High Risk** |
| Hokkaido Tuna | **Low Risk** | **Low Risk** | **Low Risk** | **Low Risk** | **Low Risk** | **Low Risk** |

**P.S.** Each **High Risk** and **Med Risk** will require a comment, and will be shown as a message in Customer and Supplier’s message center. For example, Caribbean Salmon in Jan is **High Risk**, that’s why *#Supplier 3.example – row 1* shows there.

## #3: Generic Message and private advice

Professor is also responsible for publishing messages onto the system

* Send private advice
  + Providing advices to suppliers / customers- List of advices specifically to “me”
* Publish generic message
  + Providing messages to suppliers / customers - List of generic messages