## **Open Food Network**

Investigating how Brunswick Uniting Food Coop may use this online system to improve admin and distribution processing

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In short, this website is a place for producers, distributors and retailers/hubs to connect with transparency, and has ecommerce functions to support this.

So I was wondering how well it might support us as a bulk food cooperative, in particular the areas we've been wanting to improve. I'd like to do a bit more thinking about this, but chances are I won't before someone in my family gets sick again, so am sharing what I can now;)

- Example food coop you can view without logging in: <a href="https://prod2.openfoodnetwork.org.au/westies-dry-goods-buying-group/shop">https://prod2.openfoodnetwork.org.au/westies-dry-goods-buying-group/shop</a>
- About buying groups: <a href="https://openfoodnetwork.org/user-guide/model/buying-group/">https://openfoodnetwork.org/user-guide/model/buying-group/</a>
- Setting up for a hub: <a href="https://openfoodnetwork.org/user-guide/hubs-set-up-guide/">https://openfoodnetwork.org/user-guide/hubs-set-up-guide/</a>
- Product transparency means you can more easily browse where products are coming from, what properties they have (eg organic)
- Payment can be managed through the site, with multiple options including PayPal, bank transfer and cash

It functions like an online store, which we are not, but there's no reason to say we can't still use the online store function in person (at least, none I can think of at the moment)! It also means people could put orders in ahead of the day, eg large orders to help with planning. As it's open source, it might be possible for me to find time to build a shopping interface that's optimised for how we do things on the day.

I'm not sure it's a perfect fit for what we do, but I thought it did have some good advantages worth considering. If you'd like to investigate further, please follow the links above and report your findings or forward on to someone else.

- Case study:
  - https://openfoodnetwork.org/au/learn/story/westies-dry-goods-buying-group/
- Example shop front: <a href="https://openfoodnetwork.org.au/wangaratta-food-collective/shop">https://openfoodnetwork.org.au/wangaratta-food-collective/shop</a>
- New hub in progress:
   <a href="https://openfoodnetwork.org.au/admin/enterprises/brunswick-uniting-food-co-op/edit">https://openfoodnetwork.org.au/admin/enterprises/brunswick-uniting-food-co-op/edit</a>
   (have emailed for help..)
  - o It doesn't quite have all the features we need.. See issues below.

Next task (at 10/04/02019): investigate solving issue **1A**, this looks like the most practical solution now. Can costs be up to 5 decimal places? (we only need 4 for 10g increments). I can't find anything in the forum about having costs with more decimal places, so I will need to ask! And/or jump in the code.

## Issue 1. Unable to record orders to the precision that we weigh in

We're stuck between these two limitations

- A. Product prices have a maximum of two decimal places. This means I can't set up a 1g product and sell by weight. For example product is \$4.45/kg which is \$0.00445/g, which is rounded to \$0.00
- B. Order quantities don't allow any decimal places. This means I can't set up a 1kg product at \$4.45, and sell 1.15g of it. I can only sell 1kg.
- A) could be solved by developing a change in OFN to store product costs with more decimal places, or perhaps by using a different currency (but I don't think this is an option in OFN Aus). We'd need to record amounts in 1g or 10g increments, which might be confusing, but a userscript could make this look like kilos.. (use something like this for inspiration: <a href="https://codepen.io/tutsplus/pen/KMWqRr">https://codepen.io/tutsplus/pen/KMWqRr</a>). Besides, option B will require storing as 1g increments anyway.

B) could be solved by developing a change in OFN to store quantities with decimal points. Apparently this has been raised before, but is quite complicated: https://community.openfoodnetwork.org/t/allow-non-integer-quantities-to-be-ordered/1071/6

Alternatively, a suggestion was made to store actual weight in a separate database field, and adjust price accordingly. Kirsten later told me about the feature for <u>pricing irregular items</u>.. Which is this exactly! The only problem is this can only be done in the Bulk Order Management screen which only shows paid orders.

Or can it... I tried hacking the new order screen to inject this value at the start:

```
var $qty = $('#order_line_items_attributes_0_quantity');
var $fwv = $('<input name="order[line_items_attributes][0][final_weight_volume]">');
$fwv.insertAfter($qty);
```

It works! The value is saved in the order. But the price hasn't updated. On further inspection I see the Bulk Order Screen also posts the updated price. Goody!

```
var $totalPrice = $('<input name="order[line_items_attributes][0][price]" readonly>');
var $productPrice = $qty.parents('tr').first().find('.price');
var productPrice= Number($productPrice.text().match(/[\d\.]+/));
$qty.parents('tr').first().find('.total').append($totalPrice);
$totalPrice.val(($fwv.val() / 1000) * productPrice);
```

It really works! **But**, inventory is still based on the 'quantity' and doesn't support decimal points. A frontend hack can't update the inventory. Looks like lots of <u>reports etc were considered</u>, just not inventory. So maybe a feature to allow decimal points and update inventory from final weigh volume could solve this.

## Issue 2. No facility for calculating product weight from container weight

This could be solved in the front end by simply including two new inputs (container weight and gross weight) and automatically fill the quantity from these.

Proof of concept:

```
$quantity = $('#order_line_items_attributes_0_quantity')
var $container = $('<input type="number">').insertBefore($quantity);
var $gross = $('<input type="number" name="gross">').insertBefore($quantity);
function calcQuantity(){
    $quantity.val($gross.val() - $container.val());
}
// enter in some numbers..
calcQuantity();
```

A browser plugin (userscript) could be created to do this without needing to develop in OFN if necessary. Though building the option in OFN would obviously have the greater shared benefit.

## Alternatively.. From Kirsten

- 1. Rob rigged up a system for the Baw Baw Food Hub that connects OFN to a <u>odoo</u>-based POS . . I am sure someone of your capabilities would be able to do something similar if that were the right path . . also could be a good opportunity to 'extract' and communicate info on what he did
- 2. This more recent series of posts might connect you to some europeans thinking along similar lines re. connected apps, also likely similar use case to yours <a href="https://community.openfoodnetwork.org/t/conceptualizing-a-modular-system-of-apps-for-orga">https://community.openfoodnetwork.org/t/conceptualizing-a-modular-system-of-apps-for-orga</a> nizing-food-hubs-and-other-ways-of-connecting-producers-and-consumers/1605/2.

This modularised ecosystem is likely the direction we're strongly heading in and it would be awesome if you were working on something that could connect / enhance :) This is going to be a major topic of conversation at our upcoming 'global gathering' in May in France - where we are also going to be joined by the GRAP guy who has built a whole lot of food hub stuff

using odoo in France, the <u>Data Food Consortium</u> people and the guys behind <a href="https://startinblox.com/">https://startinblox.com/</a>