



Redefining the culinary recipe, in the world of technology and upcoming culinary artificial intelligence.

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Merriam-Webster defines Recipe today as: “a set of instructions for making something from various ingredients” or “a formula or procedure for doing or attaining something”.

For Chefs, the Recipe is defined as a critical element to control quality and cost as well as achieving consistency by providing yield defined quantities. Instructions for preparing, assembling, plating, serving, giving the ability to better plan and forecast production to chefs and culinary operators.

However, just as recipes were indicated as an essential backbone of any carefully managed culinary business, it has been since then a long, continuing and increasingly growing struggle.

This is valid for all chefs and operators as they try to find (and retain) the necessary skilled employees with the ability to follow these “set of instructions” consistently or to train them well enough to reach acceptable levels of consistency into the results.

Today, the industry is facing shortage of skilled labor just as the clients and customers demand is increasing on multiple fronts such as product sourcing, quality, preparation, not to mention flexibility in offering, speed of delivery, menu changes and variety.

We are seeing a great effort from the supporting industries to assist in meeting this increasing demand.

For example, food manufacturer Cuisine Solutions that provides a great variety of ready to be customized (or not) and served high quality food items. Equipment manufacturing companies like Welbilt which offers incredibly modifiable, flexible and performing culinary suites options, allowing the operator





to compose a menu on a strong technical platform, simplifying the demand on culinary skills and bringing speed and consistency in the product transformation, finalization, and service process.

However, regardless of these efforts and growing solutions, it seems the culinary world is struggling into the acceptance and integration of the offered supporting products and technologies.

As a trained veteran chef but also as the brand ambassador of Welbilt Marine and of the innovative Welbilt KitchenConnect™, I have been asking myself why we are seeing such difficulty, almost resistance to break through that glass ceiling in the approach of product transformation in our business that we call “Cuisine”.

So, I researched and look further to understand why since the inception of recipes as the backbone of our business, we seem to be stopped in our evolution process. I went back to Merriam-Webster dictionary definition and investigated recipe synonyms and found these:

approach, fashion, form, how, manner, method, methodology, strategy, style, system, tack, tactics, technique, way, and a few of them immediately stood out.

HOW, Recipes are to tell us how, but perhaps we have defined HOW on the same fundamentals for too long and need to reconsider these.

For many years we have learned to perfect our cooking process by mastering the flame, controlling temperature and heat exposure to achieve best results, but we, as Sous Vide cuisine spearheaded this learning process, we also are learning today the utmost importance of precision in temperature control in cooking but also cooling.

Blast chilling has become shock freezing, slowing or literally stopping quality and yield depreciation and with such, we start and must recognize that frozen foods become more of a valued ingredient!

Maybe we need to learn HOW to HOW again???





STRATEGY/APPROACH: Recipes are also to tell us in which sequence, order, and timeline the food preparation, holding and serving process should take place. Here again we seem to be stuck into rigid sequences over and over. Operators are not perceiving the positive difference that precision technology can bring them, therefore preventing them to consider a new strategy and approach into the food transformation, production and delivery process which should start at the equipment and technical conceptualization of their kitchens, restaurants, food kiosks or trucks. Maybe we need to reinvent the wheel, and use our kitchens differently, in the same way Dyson saw the wheel differently and started by approaching it as a ball producing the results, we all can see today.

SYSTEM/TACTICS: Obviously for a recipe to deliver the best results the systems and production tactics (and logistics) are still in today's operators mind depending heavily in having the best chef, the right team to ensure the recipe is followed through thoroughly and precisely.

So they create systems, audits, quality control checks, roaming managers and supervisors grabbing the relevant clipboard and check (or punch) list of the day to catch an instant, a glimpse at which level their teams are operating and delivering at great labor expense.

These "controls results" being blended along with guest satisfaction surveys, give them a "measure" of the safety, quality, and efficiency of their operating unit(s). Maybe technology could help us to install continuous monitoring systems and retrieve on demand from that data the information needed, interpret it based on whom it will be sent to, from the cook-operator to the Sous Chef supervisor, Executive Chef or regional/corporate Chefs or offices.

Reflecting on these observations it becomes clear that our systems, methodology, approach, strategy, tactics or in other words, our Recipe as of today, needs to evolve into a very different tool.

Thinking, creating, and using our recipe differently will be easier to position, integrate and utilize at its best the technologies available today and soon available tomorrow.





This takes us back to the Merriam-Webster definitions of recipe where I have highlighted the specific areas of focus into transforming and evolving our recipe tool:

“a set of instructions for making something from various ingredients” or “a formula or procedure for doing or attaining something”

By integrating much more information about the ingredients, their origin, how they transform, how they hold or age in hot or cold holding, we would be able to better understand and interpret their level of safety, quality and cost during the transformation process.

If our set of instructions is accessible, to accompany the employee in the process, this will naturally close the gap of skill and knowledge that even the best training programs cannot dispense on a short-term basis, improving optimization and performance expectations on a less qualified labor force.

If the formulas are integrated and managed by the equipment and the technology, then the precision and consistency of the result, will no longer be let at the risk of employee error, as missteps, will not only be caught by the technology and universal control system, but they will also be corrected by the same technology and equipment with direct interaction with the employee,

This new Recipe will start from producers and farmers with the ingredient, marked, tracked, and controlled along the way of their evolution, during storage, transformation, and delivery to the client into the ghost kitchens, kitchens, restaurants, kiosks or trucks, as sub recipes and final recipes.

The new Recipe will integrate parameters and data to ensure that the ingredient evolution is optimized, and that this Recipe will accompany/guide the operator to make critical decisions, providing uninterrupted information/data to a Universal Control System, dispatching it simultaneously to multiple levels of supervision and management at the right time and in the best comprehensive and assimilable format.





In other words, the new Recipe must be a comprehensive tool to complete, uninterrupted traceability AND monitoring of the food product.

The new Recipe must be thought just as HACCP plans are created, starting by identifying all Critical Control Points from a food quality, yield and costs point of view and utilize technology such as KitchenConnect to navigate from point to point.

Planes flew faster and better because computers assisted pilots into what before was a manual process that was not applicable at higher speed and that stop them from progressing as that manual process was the aviation “glass ceiling”. With that same technological and intelligent assistance, Chefs will continue to increase their ability to source and commit the best ingredients to their client’s satisfaction at greater speed and variety with constant knowledge and control.

Chefs will be able to think and control such systems because Culinary Artificial Intelligence, through a combination of technology, monitoring systems and enriched culinary data; is what will be closing the existing gaps of knowledge, skills, expertise, and productivity.

Culinary Artificial Intelligence is the missing link in today’s Recipe and will be the path for the culinary world to reach a new universe of possibilities opening the gates to culinary operational leverage from the Chef-owner of a stand-alone restaurant to chains, hotel group, stadium and convention centers, entertainment parks, cruise lines and street food.

Welbilt, 3Di Creative Food Concepts, LLC and myself are committed to support the industry in understanding, embracing and integrating this new recipe tool and culinary artificial intelligence and are available to assist you and answer your questions.

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