FEEDING A WORLD WHO CAN GROW

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ABSTRACT

The proposed contribution deals with the problems concerning the quality of life of the population in countries in the process of development- particularly of school age and working - that gave their nutritional intake (daily) need a balanced approach to combat the incidence and incremental food its significant social and economic repercussions. In fact, in recent decades, the right dietary intake generated pathologies: celiac disease, diabetes, cardiovascular and vasculopathy.

The idea is an innovative automatic distribution system for food & beverage, to different temperatures. It is a system-thinking product that guarantees, especially in countries development, high feed efficiency (nutritional value and quantity correct), a security protocol spread (garrison to viral contamination) and the enhancement of local foods (promotion products to protect the territory).

In developing countries, the poor nutritional quality intake, size and epidemiological the socio-economic impact of malnutrition are such that this aspect a true social and health emergency. It means starting from the experiences of developed countries, through the use of skills multidisciplinary (food, socio-political, business administration, industrial design and ergonomics, electronic and mechanical technology) for the development of the project, as well as direct Angolan participation, Uganda and other African countries through the support of the government and university institutions, to experience the effectiveness of the results.

The poor nutrition is therefore a problem "welfare" and social large dimensions, not only in order to degeneration of the patients’ bodies, but also to the very low social contributions and labor caused by physical dysfunctions.
KEYWORDS
1. From indigenous production to automatic deployment;
2. Design (no waste) for food and beverages;

SOLIDARITY AND ALIMENTAR COOPERATION WITH THE AID OF FOOD AND BEVERAGE'S AUTOMATIC UNPUBLISHED SYSTEMS.

Davide Bruno, the author of the research (paper), intends to address challenges in developing countries concerning the quality of life of the African population – especially children and working life – that with their nutritional intake (daily) need, with particular emphasis and urgency, a balanced nutritional intake to counter the unbalanced food and its incidence and impact in social and economic terms. Indeed, in recent decades they have spawned diseases such as: celiac disease, diabetes, cardiovascular and acute vasculopathy.

In the alternative, the idea is to develop an innovative system of industrial products to promote automatic distribution of food and drink locally grown and directly produced (ready meals or preserved in packaging) in different temperatures (from 4° to 65° c). It seems to use, in the context of a food distribution, a system-product that can be guaranteed, particularly in the developing countries, a high feed efficiency (proper quantity and nutritional values), a security protocol (garrison to viral contamination) and promotion of native foods (promotion of territory).

From the experience of developed countries, developing new products to support the food industry (local and international), through the use of multidisciplinary expertise (industrial design and ergonomics, electronic and mechanical technology, business management, socio-political and food) for the development of the project, and the direct participation of the Central African countries through the support of the Government and the Universities to experiment the effectiveness of results.

Angola, Uganda, Botswana, Namibia, the Congo, etc are African countries among the most attentive and sensitive to the continent, through their nutrition policies and internal and external skills (in some cases like Angola, a bridge to the neediest States), are without a doubt, the physical places where transfer culturally project’s idea (both from formation and application).

In developing countries, the poor nutritional intake quality, size, epidemiological and socio-economic impact of malnutrition are likely to make this look like a medical "own social urgency"; in this context the "mal" nutritional aspect is among the first headache because of socio-economic instability. The food problem also occurs with dramatic clarity to the lowering of the age groups (6-22 years).

The incorrect nutrition is therefore a problem "relief" and large social, not only as regards the degeneration of organs of patients, but also to a very low contribution caused by physical dysfunctions. The author states that in reference to the World Health Organisation’s definition of "nutrition" like "a dietary intake that aims to develop a person at its highest potential in physical, psychological, social, educational, employment and, in relation to its physiological or anatomical deficiency and the environment", intends to operate in terms of advancement and innovation through the establishment and development of an integrated strategy of bio-psycho-social to improve the effectiveness/efficiency of the nutritional process in the distribution level.

Today, in developing countries, the poor nutritional intake quality, size, epidemiological and socio-economic impact of malnutrition are likely to make this look like a medical "own social urgency"; in this context the nutritional aspect is among the first headache because of socio-economic instability.

The incorrect nutrition is therefore a problem "relief" and large social not only as regards the degeneration of organs of patients but also to the low social and occupational contribution caused by physical dysfunction; this raises the question of the definition of more effective methods and tools for quantitative and qualitative monitoring of food and beverage.
Today it is becoming more and more important the issue of food distribution in schools, canteens, in cooperatives, and more generally in collective spaces. Consider, purely by way of example, the given local, peacefully due to global realities, provided by Milan Entertainment on waste: "end up in the trash of our canteens 140 tons of food every three weeks."

It is becoming increasingly difficult to keep the diamond pipeline, (from preparation to distribution) with food quality parameters for expressed meals (hot and cold), sweet and savoury snacks, drinks (hot and cold). It is even harder for structures, both with indoor kitchen or with outside catering, to prepare fresh food and in according to a customized nutrition plan. Also often comes in quantities well in excess of the demand.

Also consider that with the increasing pace of globalization and tourism, food security has become a major concern for public health.

In 2012 a sample of 511 street foods in Ghana, by the World Health Organization, has shown that most had microbial analysis beyond the acceptable limits, and a different sample of 15 street foods in Calcutta have proven to be "nutritionally unbalanced", providing energy of 70Kcal for every rupee spending.

The acronym which the author proposes is the way to solve the problem of balanced nutrition and elimination of food waste in Africa: "nourishing the planet by improving the quality of locally grown and produced food distribution directly (hot or cold) with the help of technology."

Consider the waste and poor quality of food, proper nutritional intake due to cost containment, can be fought with technology in close service of those involved in entertainment but also of distribution. The automatic distribution system is a distribution mechanism that allows you to gain important insights to optimize costs in terms of food and gain a high quality food and nutrition out of every place of work or study.

Should therefore develop an efficient "hybrid" model, in which man, at the center of a system that guarantees the quality, together with the perfect techniques and quality machines/containers, offers superior quality and reduction of squandering of goods.

Consider also that the "street food" is the consumption of food and beverages sold in a road or other public place, such as a market or a trade show, from a street vendor or seller, often from a portable stand. Historically, the street food was bought because the homes were not equipped with a kitchen. Today in African rural and urban street, the street food is a habit established.

Most of the street foods are also categorized as either finger foods and fast foods, and are less expensive on average, meals at the restaurant. According to a recent study by the food and Agriculture Organization, 2.5 billion people eat street food every day.

People buy street food for a number of reasons:
- "ethnic" meals;
- the possibility of eating quickly;
- reasonably priced.

Street Food so it can be considered a healthy and inexpensive meal, a way to socialize and in some situation a real sensory experience and values. Africa in particular has to stand out in the world for an innovative offer of Street food that takes into account the country’s cultural content.

The strengths to be exploited to make Street Food another excellence would be:
- Food and street food with short chain products that respect the environment and for the development of rural areas in Africa;
- instruments of fruition, ecological materials and functional;
- innovative means of distribution.

It is analyzing the possibility of developing new automated distribution systems, to large scale, to govern the correct amount of food dispensed. The first problematic aspect is in fact, a better price, waste, increase product quality and convey so controlled and stored foods properly.
A further problematic node is linked to the continued availability of fresh food (perishables), which often results in the need to reconfigure the distribution service at the expense of cost containment. It is therefore a necessary procedure which arises from the interpretation of the territory with the aim of supporting local communities, through the ability to control the correct nutritional intake, availability and variety, consistent to their lifestyle, food and drink.

The idea of the author is an automatic distribution system spread across the territory, with architecture and design such as to facilitate human-machine relationship (and implementation) of a lens: the "disponibility to distribute and to distribute local food balanced in amount and protein contents".

An informal, friendly product/system having the purpose of fertilize growth opportunities and steer people toward a sustainable food nutrition in the world; a product system that integrates clearly the logic of development and support conscious, central themes of nutrition in policies on the African continent.

This is a new challenge that draws its origins from deep roots and the idea of a vending machine's intelligent system "touches" the heart of the matter: how to contribute significantly to the planet's nutritional process, restoring the energy needed to return to live properly: with a food system based on contributions needed to people.

The methodological approach is aimed at achieving the following objectives relevant in terms of innovation:

O.1] discovery of a functional and behavioural methodology on bio-psycho-social model, to optimize the complex relationship between nutritional health, individual, personal and environmental factors;

O.2] impact assessment of functional and psychological-social factors-eating in the use of automatic system related to the following areas: individual properties (indoors), out (urban areas), jobs, social contacts;

O.3] identification of procedural protocols of field testing for the definition of the system of the exigencies of users and for the subsequent classification of concepts related to performance, to aids and equipment for use on completion;

O.4] identifying guidelines and experimental design of automatic distribution systems capable of stimulating the human-machine interaction through normal daily activities;

O.5] study of virtual interfaces to adjust and adapt existing products to local needs.

Pursue power principles to spread the best lifestyles. Develop ideas to realize vending machine that can aids local production of food and beverage.

It is developing two ideas for the creation of a category of technology products to support the balanced and controlled distribution of food. The food and drink they refer to the dual type: sweet and savoury snacks and drinks in the short/medium storage according to advanced principles related to the culture of street food; food grown and collected by local territories (km 0) for processing into food prepared and stored at temperatures above 65 degrees.

In the last case, the distribution system is designed specifically for workplaces, schools, public spaces, offices, etc. Each person can fill own order on-site or remotely, with traditional systems or apps, with personal computer or tablet. Reservations are sent in a telematic system to the cooking centres that prepare dishes needed to rent. The dishes are then loaded into vending machines with just a few clicks. The dish is preserved within the vending machine and, depending on the type, it maintains the proper temperature: for the hot temperature is above 65 degrees for preserving food hygiene regulations, if it is a cold dish at 4 degrees according to the standards of international law.
For the consumer, it is sufficient to introduce a "coin", a key or magnetic badge, or by mobile phone, an acknowledgment, and automatically the distributor, after recognizing the user and its reservation, presents dishes ready to be consumed.

As regards the development of a distributor of classic products (sweet and savoury snacks and drinks in the short/medium storage) "packaged", for public spaces or street food, the idea is the development of balanced distribution of products, a balanced disbursement according to the food and nutritional needs during the course of 24 hours and with a design compatible to the territorial and rural urban system: an innovative way to distribute food on the territory and to promote the culture of short chain, always derived from local food production (km 0): organic foods and healthy for the personal well-being and the environment and maintain the tradition of street food on a global level.

Developing the idea of an innovative model of product for distribution of food and beverage (a system at different levels of employment). Then build an excellence of food distribution, controlled and certified. Basically the central purpose is aimed at:

- to develop a project for the development of industrial products in the vending industry in EU and non-EU, with special reference to developing countries;
- to highlight the originality of results as highly innovative and original social characterization. In fact, there are no distributors in international markets monitored for temperature, type custom food and distribution capacity effective during 24 hours in total;
- to define the basis of a system of automatic distribution to the end user, able to balance the nutritional values necessary to guarantee a correct intake;
- to develop new materials for food preservation, packaging, geometric systems of packaging, functional aesthetic design and a new process of "distribution and instant communication."

Expected impacts as a result of the introduction of the idea, are three levels of integrated planning and management of distribution process/manufacturing and food’s vending machine.

At the strategic level:
- reduction in costs required for production of food requirements;
- greater autonomy and social participation of persons;
- reduction of costs relating to the procurement and processing of raw materials and processes;
- increased socialization and cost-quality improvement.

At the tactical level:
- exploitation of bio-psycho-social approach, within the nutritional pathways as a tool able to significantly improve the overall quality of food;
- dissemination of a culture of observation/measurement of features and user requirements/process lifecycle, through experimentation, prototyping and testing of automatic distribution systems, space and equipment, tested in research;
- reduced costs for commissions and businesses for the setting up of elements, components and sub-automatic systems designed for the real needs of users.

At the operational level:
- development of a framework of rehabilitative actions in the field of nutrition, functional and behavioral, of easy reproducibility in a high-quality model for the selfcare;
- reducing the cost and time of distribution of food to the real needs of users;
- processing of data obtained with the testing of the system as a function of scientific validation.

The author of research believes that you can build relationship, through the experience of a project on the field, appropriate and consistent with African development policies by starting an early involvement with the States of Central Africa and southern Africa.

The original appearance of the idea is "to know first how much and what is consumed."

Every detail is studied and analyzed in order to be functional, as well as efficient, and to ensure the best possible maintenance, promoting cleanliness and hygiene. Another aspect is to humanize the machine, by optimizing the
functionality, guaranteed by technology and with an aesthetic that makes it an item to show and not to hide, almost a work of “active” art that interacts with humans.

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