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> **Abstract:** The glamour of technical sophisticated innovations has overshadowed the increasing importance in modern society of another source of high valued innovations: simplicity. By analysing what is common among them, this article presents the PISA method to replicate them.

Keywords: Innovation; Simplicity; Unicorns; Problems as opportunities; Testing through emotions; Solutions already existing; Gradual implementation, pisa.

1. INTRODUCTION. THE UNTOLD STORY

Elon Musk (Vance, 2015; Isaacson, 2023), Steve Jobs (Isaacson, 2011; Schlender and Tetzeli, 2015), Bill Gates (Becraft, 2014), Mark Zuckerberg (Kirkpatrick, 2010), Michael Dell (Magretta, 1998), Pierre Omidyar (Omidyar, 2011), and so many others are technical genius. Glamorous.

But their glamour obscures another source of high value innovations which has equally great impact on people's lives: *simplicity*.

And in return, the market makes *unicorns* out of them: Spanx, Rent the Runway, Dollar Shave Club, Gorillas, Warby Parker, GymShark, Havaianas, Harry's, Gousto or Vestiaire Collective, to name just a few.

And many other simple innovations although having not still achieved unicorn status are nevertheless of high value in the hundreds of millions: Knix, Readerest, Bizchair.com, Drop Stop, Lisa Gable Accessories, Pouchee, Eyelights, TRX, etc.

In the past when life was plainer and its pace smoother, simplicity was not so much valued. Today it is the source of innumerous successes. As said, *simplicity* is complexity solved and thus the greatest sophistication.

Spanx? Became an unicorn in less than *two decades*. And what is basically Spanx?

In the words of its founder Sara Blakely *simply footless* body shaping panty hoses.

Why footless? Because she cut short (by legs length) the standard panty hoses making them less warm and the foot seams not visible when wearing sandals or open shoes. That was the original product¹.

¹ With time the company expanded its product portfolio: footless body shap-

ing panty hoses half leg, below knee, above ankle, bras, leggings, etc.

Rent the Runway became an unicorn in only half the time of Spanx, in only a *decade* and as a consequence of Jenn Hyman seeing her sister flirting with credit card debt to buy new dresses for weddings.

The solution? An e-commerce platform to rent designer apparel.

Then *Dollar Shave Club* cut again in half the time needed to become an unicorn: only *five* years. By being a home delivery of razors and blades and later adding other grooming products: creams, lotions, etc. and thus offering convenience and low price.

And *Gorillas* is a home delivery grocery company which with a ten-minute guarantee became an unicorn in... nine months.²

So, the point in Table 1 is straightforward: *unicorns do not have to be technically complex*. They can and indeed are frequently quite *simple*.

Thus *simplicity* is, besides *technology*, a *second venue* for highly successful entrepreneurship.

However, although simple innovations are more accessible to all, that does not mean they are easy. In life, what is simple is to complicate and what is complicated is to simplify.

And so, the need for a *method to create simple innovations* which are the *great second venue* for entrepreneurship. That is what the *PISA method* is about.

Naturally that each entrepreneur in Table 1 one has his/her³ specific story. And they vary considerably in age, background and education. But across all of them there are some repeated themes which represent *common* links.

This article first *summarizes* what is *common* among all great simple innovations.

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² After two and half years of its incept it was sold to Getir by 1,2 billion.

³ Henceforth whenever written she or his should be equally read he or her.

The same applies to men or women. All types. All genres. Whatever.

Table 1. A few examples of simple unicorns.

A Few Examples of Simple Unicorns				
Company Name	Initial Product	Time to Become Unicorn		
Spanx	Footless body shaping pantyhoses	Two decades		
Rent the Runway	E-commerce platform to rent designer dresses	One decade		
Dollar Shave Club	Home delivery of razors	Five years		
Gorillas	Ten-minute delivery of grocery products	Nine months		
Warby Parker	Home delivery of designer glasses	Five years		
GymShark	Non expensive designer gym wear	Eight years		
Harry's	Home delivery of grooming products	Six years		
Gousto	Meal kit boxes delivered to consumers doorsteps	Eight years		
Vestiaire Collective	Online platform to trade high fashion clothes Two decades			

And then *synthetizes that in a sequence of steps*, to allow those innovations to be replicated by anyone.

That is the essence of the *PISA method*, that the next section overviews. Then the following ones will detail each step and conclude by addressing the several myths in entrepreneurship.

2. OVERVIEW OF THE PISA METHOD: PROBLEM – INQUIRE – SOLUTION - ACTION

There are examples of entrepreneurs who just stumbled into great innovations. They were lucky. The stories of chocolate chip cookies, Coca-Cola or Levi's are such examples.

But since luck does not favour all, much less frequently, it is far better to create one's own luck, by benefiting from the experience of the multitude of successful entrepreneurs whose lives are nothing but examples of the PISA method with *its five basic characteristics*:

1st: Extremely *valuable* and technologically *simple* innovations;

 2^{nd} : The opportunities *came* to the entrepreneurs (instead of they having actively to *look for* them);

3rd: *Tests*: two types and only two are worthwhile; to rely on people's *emotions* and *actions* (not on their *thoughts* and *words*);

4th: The *solutions* already exist elsewhere (instead of having to be *created* from scratch); and finally

5th: Action (gradual implementation).

That is the essence of the *PISA method*, which summarizes the actions of visionaries who touched lives by simplifying an increasing complex world.

The next sections detail the basic steps of the PISA method, which starts by seeing entrepreneurs as *problem* solvers.

3. THE FIRST STEP: DAILY PROBLEMS

The initial step in PISA is to take into account the *opportunities* which daily life brings disguised as *problems*.

No one enjoys problems. Thus those who solve them are welcome, opening the door for entrepreneurs as problem solvers. And making of problems nothing more than opportunities in disguise.

That requires two things: organizing daily life in a non consuming way of time and then distinguishing among the five types of *problems* which constitute *opportunities*.

3.1. Organizing to acknowledge opportunities in daily life

To be aware of *opportunities* without hurting jobs, family life and leisure, requires a simple *organization* with four components:

1 - A pen and pencil in the pocket;

2 -To write down the essential every time one comes across a problem (in no more than 15/30 seconds);

3 – Then when at home to put the paper in a *drawer*; and

4 - Forget about it during two/three months.

The reason is that ideas are like birds: they fly and we tend to forget them. Thus the importance to write them down as soon as possible (and not only later when at home), following the advice of Earl Tupper (inventor of Tupperware) (Litwicki, 2000) and of Tom Monaghan (co-founder of Domino's Pizza) (Monaghan and Anderson, 1986).

And Socrates, the Greek philosopher, when questioned about what is more important, intelligence or memory, replied that: "one knows only what one is able to remember".

Later on, at home, one can then with time complete the essential of what was previously written in a piece of paper with time.

Nevertheless, one should "forget" about the idea for a couple of months in a drawer and never act immediately upon it for three reasons (later to be developed in the next section when the *I* of *I*nquire of P*I*SA will be discussed).

First, it is important to know *how frequent* the problem/opportunity is.

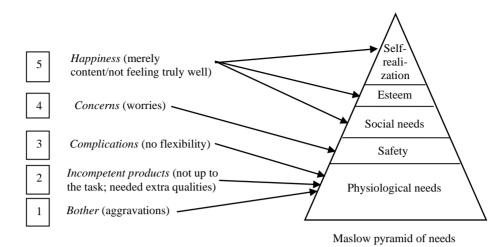


Fig. (1). Opportunities are problems which come in daily life.

Second, it is also relevant to evaluate after some time (e.g. two months) if one still feels adamant about the problem, or now, it seams to have *lost its relevance*.

And *third*, it is advantageous to *compare* all problems/ideas in order to select one, and only one, and thus enable *focus*.

So, 1) *pen*, 2) *paper*, 3) *drawer*, and... 4) to *wait*. The time to look at, to evaluate, select and act upon, will come later.

But what should one write about? About problems which come our way as we go about our lives.

3.2. The Five Types of Daily Problems which are Sources of Great Opportunities

Life brings *five* basic types of problems.

The first are bothers, hassles, grievances.

The *second* is the feeling of *disappointment* when using a product/service: the outcome falls short of expectations, the product is slightly "incompetent" and not quite up to the task and expectations.

The *third* type of problems are *complications*, complexity, lack of flexibility/versatility. To get the job done one must use several products creating an opportunity for a multitask product.

Then (4^{th}) , there are the *concerns*, the worries, our fears. Although not real but only potential, they nevertheless pervade our lives.

And finally, there is the 5th type of problems: many people live day by day, they go by, they are content. But not *truly happy*, feeling well and fulfilled. Thus the opportunity for products/services which bring *joy* into people's lives.

PISA focus on those problems which by being at the center of people's lives, are also related to the Maslow pyramid (Maslow, 1943) in Fig. (1).

Let's see a few examples of each one of the five types of problems and how they are opportunities.

Bothers, major inconveniences follow us all day long, thus the need for *solutions* that minimize or erase them.

Even before leaving home frequently one takes the laundry out of the machine. Paring and even $lost^4$ socks used to be a problem until *SockTabs* came along: they are essentially simple pins made of plastic to avoid rusting and damaging the socks. The company is valued at over one million (in 2023).

And grooming is facilitated by home delivered personal hygiene products (both for men and women) either by *Harry's or by Dollar Shave Club* (both unicorns).

Indeed, not only life is full of small inconveniences which become great opportunities, but their frequency transforms them from simple inconveniences into major aggravations (Schwartz, 2004): where to put the key? (solution: stick them to the fridge, but how?); computer cables are always messy... (solution: tie them but with what?); how to make sure family sees the message left? (solution: glue a message to the door with scotch tape...).

TwistieMag is a 1) magnet + 2) of plastic + 3) flexible that can solve all the above problems.

And whenever flying with checked luggage one can forego the hassle of checking in baggage at the airport with *Bagtag*. The system with an electronic bag tag and two apps (one at the customer's mobile and the other at the airline system), allows the passenger to proceed digitally just as when checking in plane seats: Lufthansa, Swissair, KLM, Austrian, China Southern are some of the airlines which have joined the system invented by the Dutch Erik Harkes.

The *second* major source of daily problems are products which are *not quite* up to the task. They are *incompetent*. They lack an extra quality to get the job done and thus create a sensation of disappointment. Such a sensation is a source of innovation and *opportunity*.

Soundbender is an accessory which bridges a major product shortcoming: laptops sound leave from the top to the

⁴ With socks frequently ending up inside the pockets of garments.

opposite direction of the user. Thus... Soundbender: simply a magnetic plastic device in the shape of a shell, greatly amplifying the sound and creating a business worth of 1,3 million.

The long time it takes to curl hair was solved by *The Sleep Styler*, a hands-free system to use while one sleeps. Consisting of a plush roller that straightens and curls the hair effortlessly, it can be used when eating, watching TV, or even sleeping.

The hair rollers are absorbent, heat free and made of yoga towel fabric that dries the hair fast while the foam inside ensures comfort.

The result was that within one year the entrepreneur *Tara Brown* took an idea she got while fixing her daughter's hair to one hundred million dollars in sales and a fifteen million worth company.

Pantyhoses due to its very thin texture can be easily broken, severed. As an unsolved problem is an untapped opportunity, along came *Sheertex* claiming to be for all purposes unbreakable. They survive even if pulled with the upmost force of bare hands, snagged by toenails or safety pins and even resisting to the washing machine.

In short, products incompetence is a never ending source of opportunities as products are *never perfect*.

The search for simplicity is the *third* source of opportunities since the increasing sophistication of life requires that more and more tasks must be performed and thus the need for *multi-task products*.

Day2Night is one shoe with five (removable) heals, replacing the need to travel with several pairs of shoes. And *Tanya Heath* goes one step forward providing heals in different colors and designs.

As different ladies purses are used for distinct occasions, that creates the inconvenience of transferring the content among purses that frequently differ in their number of pockets. That is what *Pouchee*, a bag to be inserted within purses, solved. And that can also be used as a purse itself.

And *Ninu* is the world's first smart perfume. With a smartphone one can select the type, amount and mixtures of fragrances in dozens of alternatives according to the occasion, weather, season or feel.

Multitask goods, bringing *extra qualities* to incompetent products or directly solving a *bother*, they all are *three types of opportunities* which respect the bottom layer of the Maslow pyramid in figure two (opportunities number one, two and three).

But there are two other important layers in the pyramid: *concerns* (number 4) and what brings *true happiness* (number 5).

Starting with *concerns/worries*, one is here in the realm of the potential, the eventual, not the real, actual, but nevertheless a source of inquietude.

What starts right at the beginning of life with feeding babies: the sharp edge of spoons is a danger and the unwillingness of many newborns to eat an inquietude. Children do have nevertheless their favourite toys in the form of elephants and other animals.

Thus the idea of adding to a silicone toy elephant, a round spoon and use that for baby feeding.

And so *Baby Toon* was born. Without sharp edges and soft (made of silicone), the short spoon makes it impossible to go deep into the mouth and is easy to grab. Besides it doubles as a toy since it comes in different colors and animals.

Baby Toon was invented by the *seven-year-old Cassidy Crowley* creating a one million worth business.

And proving that age is irrelevant *Lisa Gable* when 67 years old created a cloth strip linking the bras straps to prevent the bras from moving and so becoming a source of discomfort and concern. That was the first product of the company L. G. Accessories.

Everybody's search for *true happiness* is the *fifth* source of opportunities.

David Thoreau noted that the mass of men live lives of quiet desperation. They go by. At best content. But seldom feeling truly fulfilled and *happy*.

Thus the opportunity to bring into people's lives (by order of increasing importance): 1) *small treats*; 2) *socialization*; 3) or improving *self-esteem* and *realization*.

Examples of treats are the unicorns Gousto and Nissin Foods.

Gousto is a British meal kit retailer which delivers box kits at consumers doorsteps, among 55 recipe options per week.

Nissin Foods, another great success, are precooked instant noodles requiring only pouring hot water.

The need for *socialization* is behind the success of many chat sites, be they (e.g.) only for girls (*Miss O & Friends*), founded by Julliette Brindak when 16 years old, or for teenagers both males and females: the brothers Catherine and Dave Cook (when 15 and 16 years old respectively) founded and sold the site *Meet Me* for one hundred million dollars.

Also contributing to self-esteem is the unicorn *Vestiaire Collective*, an online platform to trade second hand luxury fashion products: from clothes to shoes to bags to jewelry, brands like Dior, Celine or Chanel are sold at up to 70% discount.

Founded in a small apartment in Paris and selling initially garments provided by friends, the company today employs 400 people in 90 countries and offers 3 million items to 9 million members.

3.3. Summary

The easiest way to innovate is to start with a *problem* detected in daily life. And which requires a solution. And problems can be one of *five* types: 1) *bothers*; 2) *incompetent products*; 3) *complications*; 4) *concerns*; and 5) *not feeling truly happy*. And they relate to different layers in Maslow's pyramid (Fig. 1).

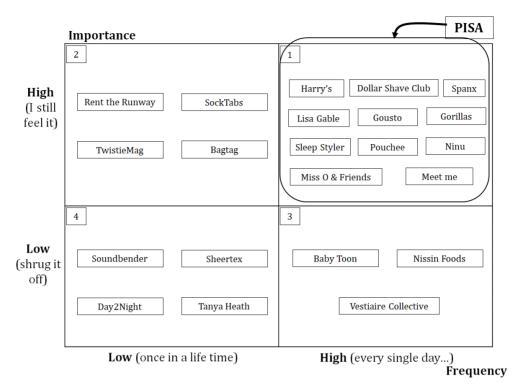


Fig. (2). Evaluating problems in terms of importance and frequency.⁽¹⁾

Note: ⁽¹⁾ The location of each problem is merely hypothetical.

Having assessed the existence of such problems, *two questions emerge: first*, the identified problem is just a nuisance or a *real grievance*? And *second*, how do *other people* feel about it? How generalized is it?

That is to be inquired next and corresponding to the I of the PISA method we turn into in the next section.

4. INQUIRING THROUGH EMOTIONS AND AC-TIONS (NEVER MIND THOUGHTS AND WORDS)

Two types of inquires are here specially useful.

4.1. Does the Problem Pass the Test of Time?

The first PISA step in the previous section was to write down in a piece of paper the problem one comes across in daily life and then put it away in a drawer for, say, *two months*.

Now that time has elapsed it is useful to open the drawer, look at all papers and ask *two questions*:

First, after time has passed, how does one *feel* about the problem? Has time weathered its importance?

And *second*, how *frequent* was the problem? During the two months period, did it happen only once or occurred *repeatedly*?

Both answers allow to place the opportunities in a diagram as in Fig. (2) (which includes only previous examples), according to the frequency (horizontal axis) and importance (vertical axis) of each opportunity. In the Fig. (2) the location of each problem is only hypothetical. To exemplify that the objective is to select the best on the balance of the two axis. The more a problem is located at the right up side of the figure, the more it is indeed a *real opportunity* and not a simple *distraction*. And that allows for focus.

4.2. Looking at Others

To inquire about the *pervasiveness* of the problem is also important before trying to solve it.

Something to be undertaken under the observation of the great marketeer David Ogilvy: people do not act as they say; do not say what they think; do not think what they feel; but act as they feel (Ogilvy, 1987).

In other words better to tap into (people's) *actions* and *feelings*, not *words* and *thoughts*, as multiple market research failures remind us: from Colgate Kitchen entrees to Harley Davidson perfumes and Thirsty Dog bottled water, McDonald's arch deluxe, Crystal Pepsi, Apple's digital camera, or Microsoft Zune (an iPod competitor). Not to mention of course the best known of all: the New Coke (Oliver, 1986).

To test actions (not words), one can use behavioral interviews. And to test emotions (not thoughts), there is the direct emotional assessment.

4.2.1. Behavioral Interviews

Behavioral questions focus on past behavior, without disclosing the intention of launching a product. One assumes

that what one did in the past is the best predictor of what will be the actions in the future. *That the past is prologue*.

For instance, to evaluate *Ninu* (the multiple perfume scents) some of the following *behavioral questions* would be useful:

- How many perfumes do you use?
- How often do you change of scent:

More than once per day?

Daily?

Several times a week?

Once a week?

Several times a month?

None?

- Do you usually carry different perfumes in your *hand-bag* or keep them *nearby* (in drawers at work, your car, etc.) in order to *change* them as you see fit?:

Always?

Often?

Sometimes?

Rarely?

Never?

- *How many* perfumes in average do you carry in your bag?

The assumptions underlying these questions are that *the need for Ninu* is greater, 1) the larger the *average number* of perfumes people use, 2) the *frequency* at which they change of scent and 3) *how many* different perfumes they carry with them in the handbags all day long.

Pouchee (bags to be put inside the purses) will be the more *in need* the 1) greater the *number of handbags ladies* in average have, 2) the *frequency* with which they change of purses (everyday? once a week?) and 3) the level of *inconvenience* felt when changing items from one bag to another.

Thus the behavioral questions of:

- How many handbags do you have?

- How often do you change handbags?

Daily?

Several times a week?

Once a week?

Several times a month?

Never?

- In a 1 (none) - 5 (all) scale which percentage of your purses *have* pockets?

- When changing of handbag what is the *average time* you spend replacing items from one into the other?

- In a scale of 1 (do not care) - 5 (hate) how do you *feel* about purses without pockets?

4.2.2 Direct Emotional Assessment

If the target of behavioral interviews are past actions, then the objective of direct emotional assessment is to tap into emotions.

That involves *direct contact* when talking with friends (the idea for Rent the Runway came from the founder seeing her sister systematically overspend in new dresses for weddings), doing small talk at a party (what led to the Dollar Shave Club innovation), or casually bumping into a friend (the idea for Kitty Litter⁵ came from Ed Lewis talking with a neighbour).

Indeed any of the above, can be the occasion to introduce (softly / unnoticed in order to avoid inducing an answer) the *problem* and watch the *reaction*.

In the case of Ninu and if having a drink with a friend: you know what? I am using a new perfume but... I still carry the old one in my purse... just...

And then to observe what the reaction is. Is it: really? Which? I know what you mean, it is so hard to decide which and when. The other day...

Or all one gets is a... um... great. Well listen, do you know that I am thinking of buying a new car...?

In the case of Pouchee: sorry for being late. I just had to return an important call. And for starts I couldn't find the phone in my purse. They are always such a mess...

And again what's the reaction? Something like: don't get me started. I can't understand why purses are always so messy. The other day...

Or?: ... quite... do you know who I met the other day and is starting a new job?

To sum up, *behavioral interviews* assess past (and present) *actions* as the best predictors for the future. While *Direct Emotional Assessment* focus on *emotions*.

And both together indicate the *potential* of the opportunity.

4.3. Summary

After having identified *opportunities disguised as problems*, this section performed *four* tests on them: *frequency* and *relevance* (after time), how people *act* (through behavioral interviews) and *feel* (direct emotional assessment).

The next step is finding a solution.

The answer to these four queries makes the *difference* between something negligible, nothing more than a small inconvenience to be endured as part of normal daily life, and a real issue, an aggravation, worthwhile investing time, energy and money into solving it.

And best if the solution to address the problem *does not need to be constructed anew*, but can simply be *adapted* from another use.

⁵ Kitty Litter is a construction material clay granulate also used as a sand substitute for cats boxes, with the advantage of being more absorbent and emitting a pleasant smell.

5. ADAPTING SOLUTIONS WHICH ALREADY EXIST (RATHER THAN CREATING THEM)

The objective here is to minimize the know-how required by a solution and that can be done in one of *six ways*.

First by *applying the net to products and services* (Kotler, 2017) which regarding previous means of communication (phone, etc.) has the two advantages, visualization and speed, thus improving some services and enabling others.

It is so that *Uber* (USA), *Bolt* (Estonia) and *Glovo* (Spain) have been in broad terms expanding from car rentals to e-scooters and bikes, restaurant deliveries, software taxis platforms, supermarket deliveries and even non-food deliveries. And they are all unicorns.

Another case is the German *Gorillas*. Founded in 2020 it took only nine months to achieve unicorn status and when operating in sixty cities in nine countries was acquired by Getir in December 2022 for 1,2 billion.

Still other example is Airbnb (shortened version of Air-Bed and Breakfast) that offers short term living quarters and breakfasts to those unable to book an hotel room in a saturated market. The company acts as a broker with its site linking home owners with clients and charging a fee for each booking 6 .

Second, it is possible to import a solution from other places, be they either distinct geographical areas or distribution channels.

American icons *Barbie and American Girl*, were neither created in the USA but both concepts were "imported" from Germany.

Ruth Handler watched that her daughter Barbara, while playing with paper dolls gave them adult roles (at the time toy dolls were representations of infants).

The prototype to fill that market gap was found by Handler during a trip to Europe when she saw the German Bild Lilli doll. And so *Barbie* was born.

It was also Germany that inspired *American Girl* (Forbes, 1997): the high quality pretty doll to play the role of daughters to girls and as an add-up to bring US history alive to them. The role model was a doll manufactured by Götz Puppenfabrik in Rodenthal, Germany.

In the case of Barbie and American Girl the solution came from a similarly developed country (Germany). But that it does not have to be so is exemplified by the hub system for airlines to minimize the number of routes: it was first invented by the *Indian Post Office*, then imported to the USA by *Delta Airlines* for passenger travel and finally adapted by *Federal Express* to cargo.

Havaianas is one of the few true global brands of Brazil, with over 200 million units sold yearly in more than 100 countries. And thus an unicorn.

The solution to Brazil's extensive number of poor people going barefoot was, so thought *Afonso Oliveira* and *Robert Fraser*, a very low priced open shoe given the warm weather.

The search led them to adapt *Zori*, the Japanese sandals made of hay and wood, into rubber in the case of Brazil. Initially sold only to the poorer classes it became later a trendy brand used by all social classes and all over the world (the USA price ranges \pm from 11 to 75 dollars).

That geography is indeed a rich source of solutions is exemplified still by Bear Hostels, the highly successful Russian chain of hostels: an idea imported from Germany, when DaniilvMishin, having lost his flight, had to stay overnight in Berlin.

And Madeira Madeira is a Brazilian 2009 "clone" of the 2001 USA Bizchair.com: a virtual furniture store.

Thus when the net (first source of solutions) fails, it is worthwhile to look around the *whole* globe scrutinizing what people do about the problem. Regardless of a country's stage of development: ahead, similar or worse, than ours.

But besides geography, another source for importing solutions from other places are *distribution channels*.

To minimize the time spent in getting laundry done, it is best to locate the solution in the path from and to people's work. That is what *Click n' Clean* did with lockers in parking-lots and building halls, being the service paid by the net.

Another example is L'eggs, hosiery for the working women of middle-low social classes $(C_1 + C_2)$ over forty years old.

The question of how to reach them since they hardly have the time to go into department stores, shopping malls or specialized stores, was solved by the examples of groceries novelties that are brought to customers attention by standalones in between the stands and cashiers, and supermarket booths were the solution adopted by L'eggs.

So, *place* (other *geographies* and different *distribution channels*) together with applying the net are relatively simple solutions. But if none of them works then one may look at how *other types of clients* satisfy a similar need.

Importing the solution from other clients is another productive source.

According to the World Health Organization, nearly 1,5 million people lose their lives in road accidents each year. Half of accidents are caused by mobile phones whose use is specially dangerous when driving motor bikes.

Other types of clients (e.g. aircraft pilots) solve the problem of communicating, using GPS and controlling other information, through technology inbuilt into their helmets.

So what Romain Duflot (both a motorbikes enthusiast and a trained fighter pilot) did was to adapt such a technology to the motorbikers helmets and founded *Eyelights* (and in the process creating a net worth company of \pm 150 million).

Still a fourth source may be adapting the solution from other needs.

⁶ The business started when Brian Chesky and Joe Gebbia had the idea of putting an air mattress in their living room and turning that into a bed and breakfast operation.

Taking an <i>old product</i> item and	Adding	Deducting
<i>Quantitatively</i> (palpable, tangible)	1	3
<i>Qualitatively</i> (in tangible)	2	4

Fig. (3). Changing a product by acting only upon accessory characteristics.

When facing an unsatisfied need (and thus an opportunity), the question to be asked is: what is done regarding similar needs? What are the solutions there? And then, adapt them.

The stream of such innovation is numerous. *Crayon holders* (invented by the 12 years old Cassidy Goldstein) prevents wax pencils from breaking using basically the same type of glass tubes utilized to hold the flowers calluses.

The *thermos* bottle used to maintain a beverage temperature was the inspiration of the *Ice Cream Canteen* that freezes ice-creams for four hours.

The *cocktail shaker* was the source for the *HyperChiller* Iced Coffee, a plastic bottle which makes frozen coffee in one minute.

And *Readerest* is simply *two magnets* to hold glasses in the shirt (one magnet in the inside and the other on the outside of the shirt). An idea that did 13 million in sales in the first three years. At present it makes 5 million a year on sales.

Adding or deducting slight changes in an already existing product or service is still another (fifth) source and by slight, minor alterations is meant maintaining the product core and adding or deducting, quantitatively or qualitatively, accessory characteristics (Fig. 3).

Adding quantitatively (cell one), represents two (or more) in one.

As air travel intensifies airports are becoming ever larger. Thus came the solution of adding a scooter to the hand baggage (*Olaf Kick Scooter*). The baggage does not have to be dispatched. The wheels prevent the baggage from being cumbersome. And the scooter from having to walk long distances.

The same principle has been used by *Roller Buggy* (baby strollers with a scooter), *TernX Carry-On* (an hybrid on luggage and stroller) and the *StashAll* line of bags: when older ladies need a walker, carrying a handbag becomes difficult. The solution are walkers which allow for bags to be hung upon.

Other times, the adding instead of *quantitative* can be *qualitative*, when the addition is *intangible*.

That is the case with *BB Cream* which is five in one: moisturizer, skin treatment, concealer, foundation and sunscreen. A success promptly imitated by brands such as Garnier, Vichy and Nivea.

Deducting quantitatively is also an alternative.

Bicycling is a good exercise. However not always allowed either by the weather or where one lives. Thus the *home bicycle* was born by simply *removing* the wheels from a normal bicycle, while keeping everything else: the handlebar, the frame, the pedals, the gear, the seat. Everything is kept, only the wheels are removed.

The hands free umbrellas to play golf, go fishing, etc., are the result of simply removing the stems. And again it should be recalled that the unicorn Spanx, described in section one, is a normal pantyhose *cut* by the length of the leg.

Finally, *deduction* can be *qualitative* (by opposition to quantitative), as the hugely successful *QB House* and *Fast Eddies* barber shops chains exemplify.

Launched in different parts of the world their principle is the same: faster (and thus cheaper) hair cuts, by eliminating hair wash (replaced in both cases by using a small vacuum cleaner) and also in the case of the Japanese *QB House* by dispensing the traditional Japanese hot towels, shoulder massages, tea and skin treatment. QB House's clients base went in seven years from 57000 to three and half million.

Finally (sixth), there is the last solution of buying patents.

When all previous sources of solutions *fail*, the *net*, importing from other *geographical areas*, from distinct *distribution channels*, adapting from different *clients*, and *needs*, and still *adding* quantitatively to the product, adding qualitatively, *decreasing* in quantity, or in quality, when nothing of the above solves the problem, before creating a product anew or a service from scratch, there is still the possibility that a *patent* on a gadget that solves the problem is available for sale.

That is what *Rick Hopper*, the inventor of *Readerest* (the magnet glasses holder)⁷ did.

Having developed the idea on his own, he discovered, when applying for the patent, that it had already been filled in, but the product had not been launched into the market.

That exemplifies the difference between an *inventor* (who creates a new product or service) and an *innovator* (who launches it into the market). The latter requires a marketing plan, financing, organizing operations and hiring a team, and not all inventors are innovators. Many are happy to just invent, patent the gadget and move on to their next idea while waiting for someone to come up to buy what they have patented (Mancuso, 1982).

⁷ As mentioned before it works by simply putting a magnet inside and the other outside a shirt, pullover, etc.

There are multiple examples. The patent for the *Bic* pen was filled in by Hungarian inventor *László Bíró*. Both in France and in the USA.

Then the French *Marcel Bich*, who had been working on the very same idea of ballpoint pens for some time, bought the patents from Biro and using Swiss machine tools founded Bic, a shortened and far easier to remember version of his own name.

Inventors and innovators have different personality characteristics. And a totally distinct starting point: the *inventor* usually starts with *technology*. The *innovator* with a problem to be solved (Drucker, 2007).

That is why the patent for the magnetic eyeglasses holder was for sale. And the reason Rick Hopper bought it making a huge success out of it.

In conclusion, if everything else fails, before creating a solution anew, it is useful to check what is available for sale in terms of patents.

Synthesis

Sometimes there is no alternative but to solve a problem with a technically sophisticated product (or service) which requires considerable know-how. If high know-how is the only way, so be it.

But to go straight into such a solution may be a waste of time, energy and money, if one of the *six* solutions listed in table 2 solves the problem. And so they should be tried beforehand.

Table 2. Six ways to create non sophisticated solutions.

Six Ways to Create Non Sophisticated Solutions				
1	Is there <i>a patent</i> for sale?			
2	Applying the <i>net</i> (to the existing business model) solves the prob- lem?			
3	Importing the solution from another <i>place</i>	Geographical area or Distribution channel		
4	Adapting the solution used by another <i>client</i>			
5	Copying the solution from a similar need			
6	Adding or deducting (quantitatively or qualitatively) accessory char- acteristics to the core of an already existing product			

6. ACTION (GRADUAL IMPLEMENTATION)

Traveler, there is no way, one makes it as one moves along; is a saying attributed to both the Spanish and Portuguese poets Antonio Machado and Fernando Pessoa.

Thus market entry should be *gradual*; step by step. Bringing *two advantages*.

First, since an entrepreneur faces unchartered territory, *mistakes* will occur. E. Musk's SpaceX failed multiple rocket launches threatening bankruptcy until success. Sara Blakely struggled until finding the right fabrics for Spanx, the shoeless pantyhose.

That failures and mistakes will occur is *not* an issue. The *question* is if one will *learn* from them, or *submerged* by them.

And the distinction lies on the *rhythm* of the market entry.

Bolivar who achieved independence for South America, said that it is in defeat that one learns how to win. Peter Drucker once asked Alfred Sloan, the CEO of General Motors, why he didn't fire a manager he was furious with because of a major blunder. "Are you crazy?, after the fortune that costed him to learn the lesson?", was the answer.

Shai Agassi the Israeli entrepreneur that emulated E. Musk with electric cars, was forced out of the market. For too much, too fast, geographic and product dispersion (e.g. not focusing on the Tokyo taxi market where he had an early great success).

Thus the first reason for *"if in a hurry, go slow"*, is the need *to learn* as one moves along; to digest mistakes rather than being overcomed by them.

The second reason is *cash*: all new ventures, as Peter Drucker stressed, are cash strapped.

Sales may increase and profits made. But cash is always scarce for new design, facilities and personnel; money is tied up in inventories and in the difference between the terms of payments and receivables. In top of that the increase in worth of trademarks, logos and patents represent profits, but do not count for immediate cash.

As *Phil Knight* (Knight, 2016) stresses in his memoirs, for years he would over and over again, have to calm down employees, banks, suppliers and even his 49% co-shareholder Bowerman by saying: "we are not broke, we just don't have any money".

Nike, between its inception in 1964 and when it went public in 1980, was always both a sales success and a highly profitable company, but always, always, *cash strapped*. In 1975 were it not for the personal intervention of the management of the Japanese trading company Nissho and Nike would have gone under.

In short, market entry should be *gradual* to *digest* rather than succumb to mistakes because *cash* will always be scarce.

But how to do it?: by *entering the market gradually* (Strauss, 2002).

That involves *first* of all, a *single product* and *a single model* at start.

Nike makes nowadays all types of sports items. For men, women and children. Garments (jackets, etc.), apparel equipment (speed ropes, bottles, backpacks) and shoes alike. For all sorts of sports (running, basketball, tennis, soccer, football, golf, even skate). And also for every day use (casual wear). And all under the overall Nike umbrella.

But in the beginning *Nike's single product* were sneakers and the *only model* the *Onitsuka Tiger*: specialized for run-

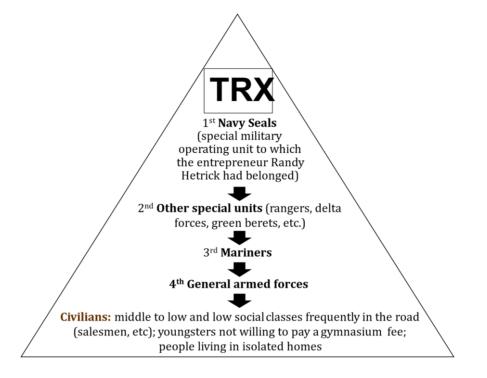


Fig. (4). The TRX trickle down.

ning, both on track (competition) and off track jogging (creamy with blue stripes down the sides).

So, for starts, a single product and a single model.

Down the road, there is a very useful Peter Drucker question to set the expansion path: *what <u>other jobs</u> can our product do?*

Febreze started as a surface cleaner and then evolved into a product in search of other jobs to do, by adding new models for laundry additives, sprays to remove odors, air fresheners (candles and plugs for cars), pet odor eliminator, and so on. As a result Febreze is today the number one brand in the market. But in the beginning, there was only the surface cleaner model.

Then piecemeal market entry, also means at start focusing on *a single type of client* and *slowly trickling down*.

TRX (total body resistance system) initially was promoted and sold solely to Navy Seals, since the entrepreneur Randy Hetrick being a member of them, knew the instructors best.

Then with time came the trickle down to:

Other special military units such us rangers, delta forces, green berets;

The marines;

The US military in general; and finally

Three types of civilians: middle lower and lower social classes frequently on the road (salesmen, backpackers); youngsters unwilling to pay a gymnasium fee; and people living in isolated homes (Fig. 4).

In *fourth* place, both *geography* and *time* should expand piecemal.

Gorillas' business model of supermarket groceries delivered in ten minutes came to be an unicorn present at its peak in over sixty cities of nine countries⁸.

But it started with *Kagan Sumer* delivering groceries only to his Berlin neighborhood, using his own bike, a mobile app and goods bought from the local supermarket and then stored at his flat. Once an order came in, he hopped on his bike and delivered it (the Gorillas app was only available within his neighborhood to ensure deliveries were on time).

Then after the initial phase, Gorillas offer expanded to customers in Prenzlauer Berg, a district of 165.000 people located in the center of Berlin. And so on.

Besides geography, *time* may also at first be limited and only later expanded.

MooseX, the personal trainer service on demand, where the customer chooses the place and time, started by being offered only on Saturday mornings.

Fifth, specialization is also useful in magazines, fairs and shows, stores and the net.

Newman's Own, the salads and dressings firm founded by *Paul Newman*, sparked its success with ads on culinary magazines for housewives.

Bette Nesmith, the inventor of Liquid Paper (the white ink corrector) sent samples to magazines specialized in of-

⁸ After its acquisition by Getir and as per January 2024 it concentrated in nineteen cities of four countries to maximize synergy between the two companies.

Simple Innovations: The Pisa Method

fice products, such as The Secretary and The Office, which then wrote articles on the innovation, resulting in thousands of inquiries about the product.

Fairs and shows are also excellent venues. *Bette Nesmith* rented the most modest spaces, with a bare chair and a table to put on Liquid Paper. Within a few years she had sold 25 million product units for a 1,5 million dollars in profits.

Finally, gradually also means customers orders *preceding* those to suppliers. The objective is to minimize inventory.

In Phil Knight's words (Knight, 2016), Nike was constantly in the risk of bankruptcy because:

"I was to blame. I refused to consider ordering less inventory. Why cut an order from 3 down to 2 million if I believed the demand out there is for 5 million? Thus I would order a number of shoes that seemed absurd and we'd need to stretch to pay for. To most observers this would've seemed a brazenly reckless, dangerous way of doing business, but I believed demand was greater than sales."

So, unless the product cost (but not necessarily the price) is very low, such as with Post-its, Liquid Paper and Kitty Litter, the bankruptcy risk increases sharply if clients orders do not precede those of suppliers, with a minimum inventory in-between.

Fig. (5) summarizes the essential of gradual implementation.

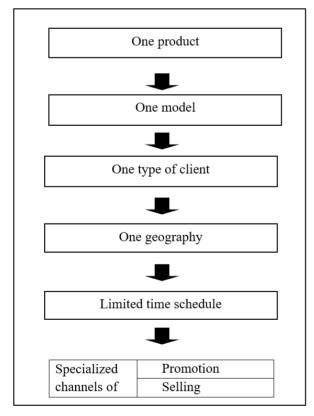


Fig. (5). Gradual market entry.

7. CONCLUDING: THE UNTOLD STORY

Entrepreneurship is a *glamorous* field. However, *five* issues which were *true* in the *past*, are today *myths*.

First innovations have been associated with highly *so-phisticated products*.

However, the glamour of those technically sophisticated innovations, overshadows a second part of reality: the dozens and dozens of *unicorns* which are *simple*. Not technologically complex, requiring high know-how and large investment in R&D.

A few examples of such unicorns are Spanx, Rent the Runway, Dollar Shave Club, Gorillas, Warby Parker, Gymshark, Fenty Beauty, Harry's, Gousto, Vestiaire Collective, Athletic Greens and Havaianas.

And then there are those which having not yet achieved unicorn status have nevertheless a worth in the multitude of millions: Knix, Drop Stop, Pouchee, Lisa Gable Accessories, Readerest, SafeGrabs or Chawel.

A *second* myth, is that to find opportunities one must invest considerable *time* actively *searching* for them.

Indeed many great ideas just came directly towards the entrepreneurs, that is met them as they would go about their daily activities. And they came in the form of *problems* (to be solved) of one of *five* types: 1) bothers (SockTabs, etc.); 2) incompetent products (Sleep Styler, etc.); 3) removing complications (Day2Night, etc.); 4) worries (Baby Toon, etc.); and 5) bringing moments of *true happiness* to merely "content" daily lives (Vestiaire Collective, etc.).

All the examples given in this article are worth millions, frequently in the hundreds, sometimes *unicorns*.

Third, there is the myth that solutions require *considera-ble know-how*.

In fact, many valuable innovations are, besides applying the net to them (Gorillas, etc.), simply imports from elsewhere with no changes at all, or only small adaptations of products/services. They are serving other needs, clients, geographies or distribution channels.

As illustrated by AirBnb, Click N' Clean, Havaianas or Kitty Litter, the granulated clay used in construction became a company worth 400 million when applied as a substitute of sand to cat litter boxes.

Other examples are the American icons Barbie, the American Girl doll and the hub systems first introduced into the USA by Delta Airlines and Federal Express, but copied from the Indian post office.

A *fourth anachronism* respects how *to test* innovations before market entry.

As people do not *act* as they *say*, do not *say* what they *think*, do not *think* what they *feel*, but *act* as they *feel* (David Ogilvy) it is far better to tap into *actions* and *emotions* than to *words* and *thoughts*. And for such a purpose there are *two types of tests* (*behavioral interviews and direct emotional assessment*), a direct consequence of the *prospect theory revolution*, that in the last two decades produced *two Nobel prizes* (D. Kahneman and R. Thaler).

Finally there is a *fifth belief* which at present no longer holds true: that entrepreneurs in order to be successful have to be *highly educated*, or at least *experts* in some area. Or even of a certain *age*.

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Companies worth *millions* were created by: Cassidy Crowley (7 years old), Abbey Fleck (8 years), Lilly Hooks (9 years), Richie Stachowski (10 years), Cassidy Goldstein (12 years), etc.

On the other hand: Anita Crook of Pouchee (59 years), Wally Blume of Denali (the ice cream and cookies company, 60 years), Mary Tennyson of Stash-All (63 years) and Doris Drucker, the wife of the great professor of management Peter Drucker, was 82 years old when she introduced Visivox.

Age? Simply a number.

And then there is no reason to put into question the *social* value of simple innovations. Even the simplest ones (such as SockTabs and TwistieMag) save the scarcest of all resources: *time*. A resource that every single day comes closer to extinction.

Simple innovations can even be *life savers*. *Drop Stop*, the seat gap filler, to be placed in the gap between a car seat and the center console, was invented by Newburguer after he almost killed both a sidewalker and himself, while driving and at the same time trying to grab a phone that had fallen to the floor of his car.

Thus, where all the above leaves us? What is the basic message of this article?

It brought a *simple method (PISA)* to create *highly valuable innovations* as people go about their *daily lives* of work, family and leisure. Without requiring <u>any</u> change in habits.

And that method is a *sequence of steps*, based on what is most *common* among all entrepreneurs who created high value innovations by touching peoples lives with *simplicity*.

Thus is can be said that in a certain sense, the PISA method, presented in this article, was written by them.

LIST OF ABBREVIATIONS:

PISA = Problem Inquire Solution Action

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