# CHAPTER TWO
# IDEA SPAGHETTI

**Having lots and lots of ideas increases the chance of having some really great ones.**

Remember Thomas Edison, the dude mentioned in the last chapter who invented the first viable electric lighting system? Turns out he also invented a bunch of other stuff too. Oh yes, Tom was no slacker. Known as 'the wizard of Menlo Park' (an area near San Francisco that happens to be just a couple of miles from Google Inc.),[1] he was one of the most prolific inventors in history, with a cool 1,093 US patents to his name, not to mention a few in the UK, France and Germany. In addition to electric lighting (1879), he invented the phonograph (1877) and the carbon microphone (also 1879, apparently a good year for Tom), which was used in all telephones for the next hundred years and in radio broadcasting.

Alex Osborn, known as the father of modern brainstorming, said that one key component of creativity is *fluency*, or how many ideas a person can generate. And Edison had this in spades. 'Prodigious' was his middle name (actually, Alva was, but let's not quibble). The other two components of creativity that Alex identified were *flexibility*, defined as the number of different types of ideas a person generates, and the *originality* of the ideas, or how unique they are.

Statistically speaking, which we try not to do too much, original ideas are those generated by less than 5 per cent of a sample. If, for instance, we were to ask 100 people for suggestions on what to do with a clothes hanger, the ideas that five or fewer of the people come up with will be classed as original (however bizarre the ideas are). Osborn claimed that fluency is the driver of both flexibility and originality. ==The more ideas we generate, the more likely it is that the ideas will include ones that are varied and original.==

If coming up with so many ideas – what we call 'idea spaghetti' – is such an important driver, the question is: 'What helps make a lot of

spaghetti?' The answer, it turns out, is not just having a big pasta pot to cook it in (though that helps), but instead the ability to think divergently. 'Meaning?', we hear you ask. Well, ==there are two types of thinking: convergent and divergent. Convergent thinking is thinking that helps us converge on a single answer – e.g. 'the answer is 42'; while divergent thinking has many possible answers.==

Looking at things more broadly, as children do, is at the very heart of creative thinking, and asking open-ended questions is a good way to stimulate it. Say hotel guests are complaining they are having to wait too long for the lifts;[2] if thinking *convergently* the hotel manager might ask an engineer to fix the problem by installing costly new lifts. But by thinking *divergently*, the manager might reach a completely different and much cheaper solution to stop the guests complaining – for instance, by giving them something to do while they wait, such as magazines to read and mirrors to distract them. (We thought one of those 'what the butler saw' peep shows would also work, but that's just us.)

In the classic tale *The Little Prince*,[3] author Antoine de Saint-Exupéry tells the story of how, as a little boy, he drew a picture of a boa constrictor after it had swallowed an elephant. The drawing looked a bit like a brown misshapen hat, as a snake would look if it had swallowed anything that big. When he asked grown-ups whether the image frightened them, they answered, 'Frighten? Why should anyone be frightened by a hat?' Even his second attempt of showing the elephant inside the boa, this time from the inside of the snake, failed with the grown-ups. 'Grown-ups never understand anything by themselves, and it is tiresome for children to be always and

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[1]Don't you find it infuriating that the spellcheck on Microsoft Word's software still highlights 'Google' as a word it's never heard of? Competition, what competition…?

[2]Example from 'Creative Fitness',T. Verberne, *Training & Development*, 1 August 1997, pp. 68–71.

[3]From *The Little Prince*, Antoine de Saint-Exupéry (translation by Katherine Howard), Egmont, 1991.

forever explaining it to them,' says de Saint-Exupéry. Later in the book the Little Prince of the story's title, who is visiting Earth from asteroid B-612, talks about grown-ups and their ways: 'Grown-ups love figures. When you tell them you have made a new friend, they never ask you any questions about essential matters. They never ask you, "What does his voice sound like? What game does he love best? Does he collect butterflies?" Instead they demand: "How old is he? How many brothers does he have? How much does he weigh? How much money does his father make?" Only from these figures do they think they have learned anything about him.'

## FOLLOWING TINKERBELL

Here's something interesting about these two different thinking styles – convergent and divergent – and how they can be used effectively. Evidence suggests that groups are better at convergent thinking, while individuals are better at divergent thinking.[4] When a problem has a single best possible answer, a group will work more effectively getting there than people working on their own do.  But when many different ideas are required, a group comes up with more clichéd and traditional ideas compared to individuals. **Yes, contrary to the received wisdom, perpetrated we suspect by meeting facilitators and manufacturers of snack foods, group brainstorms are not always worthwhile.** In fact, bad brainstorms can be counterproductive, leaving participants feeling frustrated, confused and fat.

One reason for this is that groups generally try to avoid conflict, and yet by their very nature wildly diverse ideas are often in conflict with one another. The group tries to keep things on an even keel so that

[4]'Improving the Creativity of Organisational Work Groups', Leigh Thompson, *Academy of Management Executive*, 2003, Vol. 17, No. 1.

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Most creative people like us have more ideas than they know what to do with. They will drive themselves crazy in the middle of the night trying to find a pencil and paper in the dark to make a note of the latest idea so they can fall back to sleep! Most of these ideas are great and you can spend hours discussing them over breakfast or in Starbucks after an espresso jolt. Only, after the espresso the idea you were talking about seems to morph into five other ideas, and in fact all of them are connected somehow to another idea you had three years ago.

By the time you've left Starbucks and fought through the traffic or climbed over 50 train commuters, balancing your briefcase and squashed sandwiches on your head, you've had a few more ideas about hover shoes and newspaper sandwiches that double up as news and breakfast and, before long, it's all turned into a Beatles' song and you are singing 'newspaper taxis appear on the shore' as you burst through the office door drenched from English summer rain. Of course, the office staff all think here comes that so called 'creative' nutcase again, singing with his sandwich on his head… why on earth do we pay him?

By the time our creative genius has got to his desk he has what we call *'idea spaghetti'*. In other words, a plate full of ideas but without a knife and fork! Now CEOs are often looking for ideas, but sometimes people hide the knives, forks and plates and the creative genius is left hyperventilating or behaving like an overactive puppy dog jumping up at anyone around him, yelping random bits of idea scraps or scratching and whining at the closed door of a CEO or chairman. We know there's a better way to keep the pot bubbling so that everyone gets some of that wonderful spaghetti.

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the idea generation is a *pleasant* experience rather than a particularly *creative* one. People smile, they say nice things about one another's shoes, and come up with ideas that are all pretty much alike. In fact, participants often go through certain social rituals as if they were at a cocktail party. They tell stories, repeat ideas and make lots of positive noises: 'Hmm. That's a good one. Pass the chive 'n' onion oven-baked crisps, would you?'

**Groups also have a tendency to slack off and only do as much, or as little, as the least productive person in the group.** This is called 'downward norm setting', even if the slacker in question isn't actually called Norm, and alludes to the fact that the least productive members of the group have more of an influence on overall group performance than the high-flyers. And then there's the mix of distractions that come with working in a group. Just when you've started an interesting train of thought, some bozo interrupts with his or her own and by the time you've heard what they had to say your mind is blank again.

This is not a plea to work on your own when trying to solve creative problems. If some of these barriers can be removed, working in a pair or as a small group can be very effective. One way is to include a healthy mix of people from different backgrounds, or a mix of healthy people from different backgrounds. Ideally both. The point being, if they are *not* all people with similar ideas, interests, beliefs and love of bizarrely patterned socks, the chance for some novel ideas to bubble through is greatly increased. Another way is to give the participants in brainstorming sessions some high benchmarks to aspire to. Telling them how many ideas another group came up with, or telling them that their ideas will be posted for others to see, for instance, will bring out the competitive spirit in them and encourage them to come up with more ideas themselves – 'Sod those oven-baked crisps! I'll be dammed if those losers on the 12th floor come up with more ideas than us!'

Competition is good for the creative process, but the tendency for people to pooh-pooh one another's ideas simply because they weren't the ones who had thought of them – the 'not created here' syndrome – should definitely be avoided. The trick is to take the ego out of the process and to *follow Tinkerbell* (the fairy in *Peter Pan*),[5] the brightest light in the room. **If the group is rewarded as a whole for the best idea, then the participants will be motivated to build upon one another's ideas rather than do their best to ensure theirs is the one that wins out.**

Paul Allen, co-founder of Microsoft, clearly recognises the importance of group dynamics in creative thinking. In 2003, with a $100-million commitment, he founded The Allen Institute for Brain Science – a collaborative effort by a group of some of the world's top scientists to deepen our understanding of the human brain. In aiming at breakthroughs, as Paul told Business Playground, 'A lot of it's about bringing the right people together to become the optimal creative team.' The Institute's inaugural project is the Allen Brain Atlas, a geographic depiction of the mouse brain at the cellular level. By combining neuroscience and genomics to create a three-dimensional map of mammalian gene expression, the Atlas will provide invaluable insights into human disorders and diseases from Alzheimer's and Parkinson's to epilepsy, schizophrenia, autism and addiction. For the project to succeed, ultra-creative thinkers from different scientific disciplines need to work together. 'Everybody wants to say something, but you need people who will listen to each other, *really* listen, and understand where the other person is trying to go,' Paul says.

[5]Originally in J.M. Barrie's 1904 play and then his 1911 novel, *Peter and Wendy*, her name was Tinker Bell. For the 1953 Disney movie, *Peter Pan*, she was an attractive young blonde in a tight, lime-green mini dress and was modelled on the actress Margaret Kerry.

# THE PERFECT BRAINSTORM

The *perfect brainstorm* removes the barriers to creativity by letting all ideas come out and be given a chance to breathe without the judgement and criticism that might otherwise kill them. It's like yoga without the grunting. **People, especially grown-up people, are afraid of doing something embarrassing in a group of peers (although that doesn't quite explain the popularity of reality TV or talent shows).** Tim Brown of IDEO talks about a creativity exercise that Robert McKim, founder of Stanford University's Product Design Program, would often use to prove this to a class of adult students. He would give them each a piece of paper and a pencil and ask them to draw, in just 30 seconds, the person sitting next to them. At the end of the time limit their sketches would, of course, be crap. And then they would invariably apologise to the person they drew. 'Yes, I know – sorry!'

Ask children to do it and they won't be embarrassed by their unflattering attempts to capture the looks of their peers. Have they no manners? Or, more likely, have they not learned to be afraid of the opinion of others? For grown-ups who expect rules, establishing some for creativity is important. One being: 'No idea is a bad idea.' And, in that vein: 'Don't be insulted if I make your nose look big on a sketch I'm asked to draw. I'm not a very good artist. The time I was given wasn't enough. And, well, it *is* kind of bulky.'

Both the setting of a brainstorming and how it is structured are important. To get the right brain to do its job, some form of 'meditative zoning out' is required so the left brain doesn't interfere before the ideas have been properly formed. Finding a space without too much formality or rigidity helps. Some wise folk have gone so far as to recreate the feeling of being inside a cloud by putting brainstorm participants inside a chamber made of billowing silk. Just imagine the ideas a formation of parachutists must have as they drift towards the ground under canopies of silk.

"Once, about 15 years ago, I was up a tree house in Jamaica with a chap called Brian Reynolds. It was New Year's Eve, we were in Montego Bay and he wanted to be at his friends' party, at the Fault Line in Kingston, on the other side of the island. He also wanted to share New Year with his family in Yorkshire, and he also wanted have a jam session. Most people were saying he was crazy, and even I was doubtful, but he was so enthusiastic I followed him around, fascinated to see how he was going to pull this off and entertain us, his guests, at the same time. But lo and behold, by around 8 p.m. that night I was talking to his mother in Yorkshire by video conference and even me and Brian sang a few Yorkshire songs with her while up in the tree house with a guitar and a computer. Then the Kingston party kicked in and Brian had a telephone dangling in front of the sound system in Kingston. He had dismantled it at our end and wired it through amplifiers and soon we were jamming with reggae band Third World playing live in Kingston and us playing live in Montego Bay, and laughing with his family watching in Yorkshire on a screen and drinking 'overproof' Jamaican rum!

Next morning, with a terrible hangover, Brian said, 'I think I will create a family of systems like this.' He was convinced this would be the future. And he registered the trademark iBook and patented lots of this stuff, such as interactive web books, voicechat and personas to text and converse with. Needless to say, given how what he envisioned has pretty much turned out to be reality, Brian is doing OK! And because he loves jamming so much he has now invented a way everyone can play real guitar easily using his own tuning method (take a look at **www.uplay2.org**)."
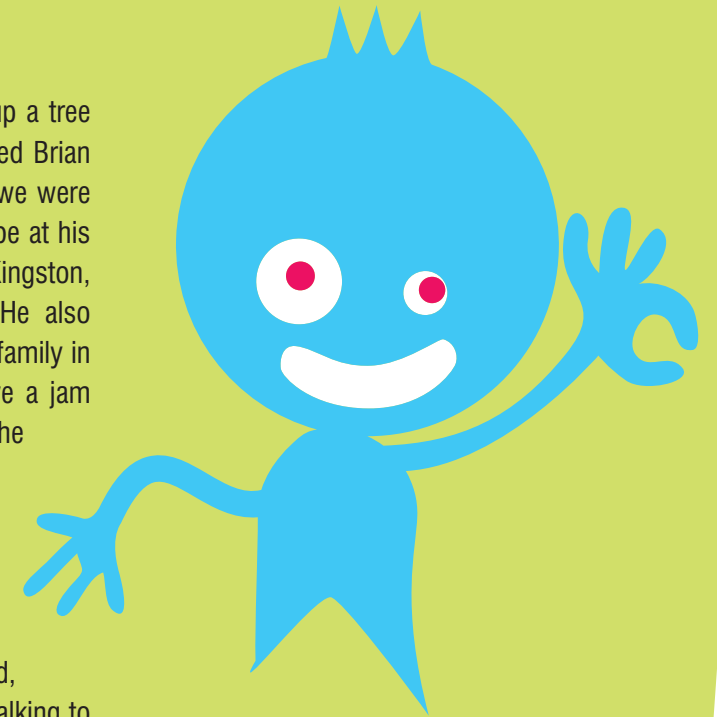
# IT TAKES TWO, BABY

Of course, there is a happy medium between working on your lonesome to come up with creative ideas and being part of a gang. And that's working with a partner. Many of the problems found with the group dynamic disappear while still providing the benefits of having someone to bounce ideas off and adding a different perspective. Think Rodgers and Hammerstein, Lennon and McCartney, Rice and Lloyd Webber, Bernstein and Sondheim, Black and Scholes, or The Captain and Tennille.

Paul Allen started Microsoft with Bill Gates, which made him one of the richest men in the world. As he told Business Playground: 'I was lucky to find an ideal partner in Bill Gates. He was more intrigued by the business side of things, and I wanted to focus on the technology side, so we complemented one another really well.' (For more of his interview, see Chapter 3.)

# THE INNOVATION TRAIN

Tickets please!

**Innovation never stops; it is an ever-spinning wheel.** Think it's done? Think again. The cycle continues without faltering, like a toy train on a circular track, passing through the stations along the way. There's no last stop, just the station before the next one. When done right, the trip around the train track is fun. The stations will become as familiar as old friends, but the journey is always different. Who-oo whoooooo! Here's our track.
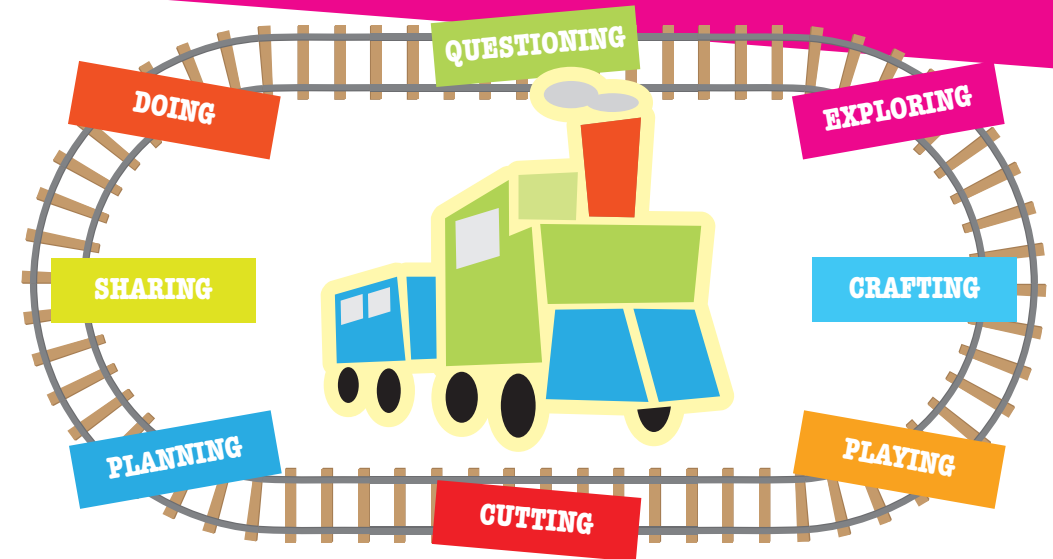


Each station along the way represents one of the eight key stages of innovation. Starting at the top:

**Questioning**  What can be improved upon? What is it about a product or service or situation that isn't quite right? Why would anyone be interested?

**Exploring**  What can we find out about it? What information is there about the thing we're trying to improve?

**Crafting**  What's the best way to describe the problem we're trying to solve? How can we capture it in its simplest, clearest form?

**Playing**  How can we solve the problem in a creative way? What creative techniques can we use to look at the problem in new ways and come up with innovative solutions to solve it?

**Cutting**  What ideas should we focus on and which ones should we discard? Which are the ones that have the greatest potential for success?

**Planning**  How do we put the idea into practice? What steps do we need to take, and who should we involve to help us?

**Sharing**  What do other people think of the idea? How can we improve it so they are as committed to it as we are?

**Doing**  Now we've answered all the questions, let's put the idea into practice.

And so it continues, on to the first station on the innovation journey again without stopping. Back to …

**Questioning** What can be improved upon? What is it about a product or service or situation that isn't quite right? Why would anyone be interested?

In this book we're going to take a stroll around some of these stations in a little more detail and introduce techniques to help make the journey go smoothly. Sandwiches and Thermos packed? Settled in a comfortable seat with a good view of the passing scenery? Let's go!

All aboard!

## MOVE ONE SPACE FORWARD TO THE NEXT CHAPTER … OR ROLL THE DICE

The more ideas we come up with, the more likely it is that one or two of them are going to be very good ones (now we know – size really does matter). So we need to do what we can to stimulate the creation of a ton of ideas, or what we call *idea spaghetti*, and that means thinking very divergently rather than trying to converge on one single answer. Brainstorms can be good ways to elicit divergent thinking, but they are a mixed blessing and can be counterproductive if not done right. The perfect brainstorm involves having clear parameters, including a mix of people from different backgrounds, encouraging a bit of healthy competition and setting high expectations for performance. So creativity isn't about coming up with the one idea that will change the world, it's an exhilarating journey – the innovation train that never really ends.

In the next chapter we go on a scavenger hunt for things to innovate.

I love bouncing ideas off inspiring people who also have spaghetti heads (or can cope with one). This could be anyone from a musician like Bono, The Edge and Bob Geldof, to film directors like Jim Sheridan or Shekhar Kapur, engineering or technology braniacs like Paul Allen or Nokia Exec Vice-President Tero Ojanperä. With people like these, it's a kind of ongoing conversation that never ends and it could be face-to-face in the middle of Africa or on a helicopter over a volcano in Hawaii … or in a fish and chip shop in Seattle. It could be via email or late-night phone calls, or in San Francisco sitting in Visa's boardroom with the CEO and CTO and the next day walking around Greenwich Village in the rain with Lou Reed discussing the same thing.

I've also been in floods and avalanches in Jamaica with the highly intelligent Shakira, and we never stopped the spaghetti-type discussions. In fact, Shakira and I carried on emails for a year afterwards in coded pasta conversations where she would sign off as Madame Tortellini and I would reply from the Linguini Brothers. My favourite to play 'wonky speak' with is Sam Roddick, with whom I have fast and furious iChats that usually leave us exhausted, ending in a brain orgasm. Sam is the creator of Coco de Mer (Erotic Emporiums) and I am fortunate enough to be a partner with Sam and her sister Justine in this sumptuous venture (never a bored meeting, I can tell you!). Sam and Justine are the daughters of Gordon and the late Anita Roddick, who founded the Body Shop, and Anita and I would often exhaust ourselves with brain-sparking sessions.

## Instructions

1. Each player (from one to four people) picks a fork.
2. Agree on one topic that you want to come up with ideas for – choose from our list or make up your own.
3. Take a prong on your fork and follow the spaghetti until you locate the ingredient at the other end.
4. The number on the ingredient is the number of ideas you need to come up with in five minutes.
5. You get a point for every additional one you come up with, but lose one for every idea you are short of the target.
6. Play four rounds using different prongs and choosing different topics each time.
7. The winner is the person at the end with the most points.

# BOARD GAME: IDEA SPAGHETTI

**How it works:** The more ideas we think up, the more likely it is we'll have a good one. In this game the object is not so much to come up with a solution to a problem but to train our brains (in fact, it's a 'brain-train') to generate lots of ideas (or spaghetti).

**How to play:** Players pick a fork and, by following the spaghetti strand to the ingredient it is attached to, see how many ideas they need to come up with in five minutes. In the warm-up round players should pick problems from the list below and then, when they've got the hang of generating lots of ideas fast, they can try it on a problem of their own choosing. They play four rounds, picking a different idea topic for each round and a different prong on their fork. They earn a point for every idea they come up with greater than the number they're required to, and lose a point for every one that falls below. So, if the ingredient says 12 ideas are required and they come up with 15 ideas, that's 3 points, but if they only come up with 10, they lose 2 points.

**How to win:** Players have five minutes per round, and after four rounds the player with the greatest number of points wins!

Another version of the game is a bit of a do-it-yourself game that doesn't involve a board at all, just some bits and bobs you should be able to find around the house. First, cut up some small pieces of card into the shape of ingredients – like mushrooms, tomatoes, ham, cheese – and write on each one a topic to generate ideas for. Challenges could, for instance, be coming up with 'new names for pasta', 'uses for a brick', or 'ways to generate power'. Players can choose to come up with their own challenges or use the list of suggestions given below.

Again, players will have five minutes to come up with as many suggestions (or as much spaghetti!) for each challenge as possible. But first the players have to pick up one of the ingredients from the bowl to decide which topic they'll be generating ideas for. Attach a metal paperclip to each piece of card and place all the ingredients on a plate or in a shallow bowl. Now find some small magnets (maybe from that Travel Scrabble set, or perhaps fridge magnets) – one per player – and tape them on to pieces of string. (How long is a piece of string? In this case, about the length of a strand of spaghetti.) Tie the other end of the pieces of string on to the prongs of some forks and – hey presto! – we're ready to play. Players simply dangle their spaghetti strands into the bowl to choose the ingredient they'll be using for their idea spaghetti.

**Topics for ideas:** Make me healthier; improve my neighbourhood; get-rich-quick schemes; impress the boss; work less; have more sex; use the car less; improve air travel; titles for a new movie; new names for pasta; ideas for new national holidays; ways to make me famous; save energy; fun excursions; titles for a new

song; get more sleep; uses for a brick; names for a new restaurant; helping the homeless; theme hotels; reality TV shows that ought to be made; saving money; things they should teach in school but don't; generating power; April Fools' jokes; making parking easier; ruling the world; titles for your autobiography; saving water; odd adventure holidays; weird ice-cream flavours; silly gadgets.